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GE80ET0105

COGENERATION TECHNOLOGY ALTERNATIVES STUDY (CTAS)

GENERAL ELECTRIC COMPANY
FINAL REPORT

VOLUME VI - COMPUTER DATA

PART 1 - Coal-Fired Nocogeneration Process Boiler

W.F. Knightly

Section B

May, 1980

PREPARED FOR
National Aeronautics Space Administration
Lewis Research Center
Under Contract DEN3-31

FOR

U.S. Department of Energy
Office of Energy Technology
Division of Fossil Fuel Utilization



(NASA-CR-159770-Pt-1-B) COGENERATION
TECHNOLOGY ALTERNATIVES STUDY (CTAS).
VOLUME 6: COMPUTER DATA. PART 1:
COAL-FIRED NOCOGENERATION PROCESS BOILER,
SECTION B Final Report (General Electric

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COAL-FIRED NOCOGENERATION PROCESS BOILER

5.3 - CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

DATE 03/31/79
I SE-PEO ADV. DES. ENGRG.

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY
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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 20111

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
N O C O G E N E R A T I SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.029	0.006	0.034	0.031	0.071	0.100	0.
	ISLAND TOTAL	0.029	0.006	0.034	0.031	0.071	0.100	0.
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.113	0.233	0.356	0.321	0.910	1.023	0.
	ISLAND TOTAL	0.113	0.233	0.356	0.321	0.910	1.023	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.042	0.035	0.032	0.109	0.109	0.
	ISLAND TOTAL	0.	0.042	0.035	0.032	0.109	0.109	0.
TOTAL THIS CASE		0.141	0.281	0.426	0.383	1.090	1.231	0.
INDIRECT COSTS								
	SPARES -						0.003	
	START UP -						0.008	
	SPARES+STARTUP						0.011	
	CONTINGENCY -						0.186	
	ENGINEERING SERVICES						0.075	
	A-E FEE						0.062	
GRAND TOTAL							1.566	

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PROCESS 20111

ECS DEADW3 PROCESS MEGAWATTS 1.94 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
 DIESEL-ADVANCED-3 SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 18. KW FUEL= 5228.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.035 0.035	0.007 0.007	0.042 0.042	0.037 0.037	0.086 0.086	0.121 0.121	23.081 23.081
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	1.453 1.453	0.163 0.163	0.163 0.163	0.146 0.146	0.471 0.471	1.925 1.925	368.094 368.094
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.095 0.095	0.196 0.196	0.299 0.299	0.269 0.269	0.764 0.764	0.859 0.859	164.319 164.319
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.070 0. 0. 0. 0.070	0.064 0.010 0.013 0.025 0.055 0.167	0.056 0.017 0.013 0.025 0.047 0.157	0.050 0.016 0.011 0.022 0.042 0.142	0.169 0.043 0.037 0.071 0.145 0.466	0.169 0.113 0.037 0.071 0.145 0.536	32.400 21.626 7.018 13.666 27.721 102.431
TOTAL THIS CASE		1.652	0.532	0.661	0.595	1.788	3.440	113.746
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.033 0.028 0.061	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.525 0.210 0.175	
GRAND TOTAL							4.412	844

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PROCESS 20111

ECS DEHTPM PROCESS MEGAWATTS 1.94 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
 ADV-DIESEL-HEAT-PUMP SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 18. KW FUEL= 5314.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.034 0.034	0.007 0.007	0.040 0.040	0.036 0.036	0.083 0.083	0.117 0.117	21.994 21.994
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA 32. DIESEL-ENGINE-GENERA ISLAND TOTAL	1.488 0.013 1.480	0.164 0.002 0.165	0.164 0.001 0.165	0.147 0.001 0.149	0.475 0.004 0.479	1.943 0.017 1.960	365.616 3.137 368.753
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.088 0.088	0.182 0.182	0.278 0.278	0.250 0.250	0.710 0.710	0.798 0.798	150.263 150.263
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.067 0. 0. 0. 0.067	0.061 0.010 0.013 0.023 0.053 0.160	0.053 0.017 0.013 0.023 0.045 0.151	0.048 0.015 0.011 0.021 0.040 0.136	0.162 0.042 0.037 0.068 0.138 0.448	0.162 0.109 0.037 0.068 0.138 0.513	30.418 20.481 6.905 12.742 25.974 96.520
TOTAL THIS CASE		1.869	0.514	0.634	0.571	1.719	3.388	107.429
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.033 0.028 0.062	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.517 0.207 0.172	
GRAND TOTAL							4.346	819

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PROCESS 20111

ECS DES0A3 PROCESS MEGAWATTS 1.94 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
DIESEL-S0A-3 SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 18. KW FUEL= 5373.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.035 0.035	0.007 0.007	0.042 0.042	0.038 0.038	0.087 0.087	0.122 0.122	22.675 22.675
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	0.885 0.885	0.130 0.130	0.130 0.130	0.117 0.117	0.377 0.377	1.062 1.062	197.682 197.682
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.095 0.095	0.197 0.197	0.301 0.301	0.270 0.270	0.768 0.768	0.863 0.863	160.610 160.610
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.070 0. 0. 0. 0.070	0.065 0.010 0.013 0.025 0.056 0.169	0.056 0.017 0.013 0.025 0.048 0.159	0.051 0.016 0.011 0.022 0.043 0.143	0.172 0.044 0.037 0.072 0.147 0.471	0.172 0.113 0.037 0.072 0.147 0.541	31.972 21.094 6.828 13.343 27.371 100.608
TOTAL THIS CASE		0.885	0.503	0.632	0.569	1.703	2.588	105.815
INDIRECT COSTS								
	SPARES						0.018	
	START UP						0.020	
	SPARES+STARTUP						0.038	
	CONTINGENCY						0.394	
	ENGINEERING SERVICES						0.158	
	A-E FEE						0.131	
GRAND TOTAL							3.308	616

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PROCESS 20111

ECS FCPADS PROCESS MEGAWATTS 1.94 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
FUEL-CL-PHOSACID-D3 SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 18. KW FUEL= 5279.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.035 0.035	0.007 0.007	0.042 0.042	0.038 0.038	0.087 0.087	0.122 0.122	23.168 23.168
2. FUEL-UTILIZATION-CLE	26. REFORMER-SHIFTER-AND ISLAND TOTAL	0.278 0.278	0.028 0.028	0.042 0.042	0.038 0.038	0.107 0.107	0.385 0.385	72.901 72.901
3. ENERGY-CONVERSION	36. FUEL-CELLS-PHOSPHORI ISLAND TOTAL	0.320 0.320	0.032 0.032	0.048 0.048	0.043 0.043	0.123 0.123	0.443 0.443	84.007 84.007
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.097 0.375	0.200 0.228	0.306 0.347	0.275 0.312	0.781 0.888	0.877 1.262	166.195 239.096
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.070 0. 0. 0. 0.070	0.065 0.011 0.013 0.025 0.057 0.170	0.057 0.018 0.013 0.025 0.048 0.160	0.051 0.018 0.011 0.023 0.043 0.144	0.173 0.044 0.037 0.073 0.148 0.474	0.173 0.114 0.037 0.073 0.148 0.544	32.725 21.664 6.951 13.754 28.021 103.115
TOTAL THIS CASE		0.800	0.437	0.598	0.538	1.572	2.372	101.876
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.016 0.018 0.034	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.381 0.144 0.120	

GRAND TOTAL

3.032

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PROCESS 20111

ECS STIRL PROCESS MEGAWATTS 1.94 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 24.
 STIRLING-1472F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 22. KW FUEL= 6420.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.034 0.034	0.007 0.007	0.041 0.041	0.037 0.037	0.085 0.085	0.120 0.120	18.623 18.623
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB 29. STIRLING-ENGINE-COMB 21. OIL-FIRED-BOILER ISLAND TOTAL	0.027 0.501 0.081 0.609	0.003 0.052 0.168 0.234	0.003 0.062 0.257 0.323	0.003 0.058 0.231 0.290	0.010 0.181 0.858 0.847	0.036 0.682 0.737 1.456	5.661 106.211 114.858 226.729
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.064 0. 0. 0. 0.064	0.063 0.010 0.013 0.022 0.055 0.162	0.055 0.016 0.013 0.022 0.046 0.152	0.049 0.014 0.011 0.020 0.042 0.137	0.167 0.040 0.037 0.064 0.143 0.451	0.187 0.105 0.037 0.064 0.143 0.515	26.030 16.306 5.715 9.983 22.258 80.292
TOTAL THIS CASE		0.707	0.403	0.516	0.464	1.383	2.091	72.344
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.014 0.016 0.030	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.318 0.127 0.106	
GRAND TOTAL							2.672	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20461

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 659.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.516	0.103	0.335	0.302	0.741	1.257	0.
	3. LIMESTONE/DOLOMITE-U	0.329	0.211	0.187	0.169	0.896	0.896	0.
	ISLAND TOTAL	0.845	0.315	0.523	0.470	1.308	2.153	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	6.495	7.495	8.116	7.305	22.916	29.410	0.
	ISLAND TOTAL	6.495	7.495	8.116	7.305	22.916	29.410	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.734	0.689	0.620	2.042	2.042	0.
	ISLAND TOTAL	0.	0.734	0.689	0.620	2.042	2.042	0.
TOTAL THIS CASE		7.339	8.543	9.327	8.395	26.265	33.505	0.
INDIRECT COSTS	SPARES						0.147	
	START UP						0.252	
	SPARES+STARTUP						0.399	
	CONTINGENCY						5.101	
	ENGINEERING SERVICES						2.040	
	A-E FEE						1.700	
GRAND TOTAL							42.644	

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PROCESS 20461

ECS PFBSTM PROCESS MEGAWATTS 28.50 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 659.
 PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU*10**6= 378. KW FUEL= 110868.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.582	0.116	0.378	0.341	0.835	1.418	12.788
	3. LIMESTONE/DOLOMITE-U	0.363	0.224	0.198	0.179	0.601	0.964	8.697
	ISLAND TOTAL	0.945	0.341	0.577	0.519	1.437	2.382	21.484
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	8.305	1.578	1.163	1.048	3.787	12.092	109.062
	ISLAND TOTAL	8.305	1.578	1.163	1.048	3.787	12.092	109.062
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	2.898	1.219	0.821	0.739	2.779	5.677	51.203
	ISLAND TOTAL	2.898	1.219	0.821	0.739	2.779	5.677	51.203
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	3.088	0.	0.	0.	0.	3.088	27.851
	ISLAND TOTAL	3.088	0.	0.	0.	0.	3.088	27.851
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.863	4.508	4.848	4.363	13.718	17.582	158.583
	ISLAND TOTAL	12.188	8.086	6.010	5.409	17.505	29.373	287.646
TOTAL THIS CASE		19.099	7.645	7.408	6.667	21.721	40.820	60.138
INDIRECT COSTS							0.382	
	SPARES						0.342	
	START UP						0.724	
	SPARES+STARTUP							
	CONTINGENCY						6.231	
	ENGINEERING SERVICES						2.493	
	A-E FEE						2.077	
GRAND TOTAL							52.345	

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PROCESS 20461

ECS STM141 PROCESS MEGAWATTS 56.07 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 659.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1008. KW FUEL= 295495.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.848	0.130	0.421	0.379	0.929	1.577	5.338	
	3. LIMESTONE/DOLOMITE-U	0.397	0.236	0.209	0.188	0.633	1.029	3.484	
	ISLAND TOTAL	1.044	0.366	0.630	0.367	1.562	2.607	8.821	
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	12.637	3.159	2.588	2.329	8.076	20.713	70.095	
	ISLAND TOTAL	12.637	3.159	2.588	2.329	8.076	20.713	70.095	
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.579	0.	0.	0.	0.	6.579	22.263	
	ISLAND TOTAL	6.579	0.	0.	0.	0.	6.579	22.263	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.921	0.872	0.785	2.577	2.577	8.722	
	ISLAND TOTAL	0.	0.921	0.872	0.785	2.577	2.577	8.722	
TOTAL THIS CASE		20.260	4.446	4.089	3.680	12.216	32.476	12.455	
INDIRECT COSTS							0.405		
	SPARES						0.298		
	START UP						0.693		
	SPARES+STARTUP								
	CONTINGENCY						4.975		
	ENGINEERING SERVICES						1.990		
	A-E FEE						1.658		
GRAND TOTAL							41.793		

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PROCESS 20461

ECS STM141 PROCESS MEGAWATTS 28.50
STM-TURB-1465/1000F SITE FUEL= COAL-AFB

PROCESS TEMP. 250.

COGEN FUEL BTU*10**6=

PROCESS HEAT(BTU*10**6) 659.

495. KW FUEL= 145035.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.581	0.116	0.378	0.340	0.834	1.415	9.759
	3. LIMESTONE/DOLOMITE-U	0.363	0.224	0.198	0.178	0.601	0.963	6.642
	ISLAND TOTAL	0.944	0.340	0.576	0.518	1.435	2.379	16.401
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	6.250	1.562	1.263	1.155	4.000	10.250	70.674
	ISLAND TOTAL	6.250	1.562	1.263	1.155	4.000	10.250	70.674
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.085	0.	0.	0.	0.	4.085	28.165
	ISLAND TOTAL	4.085	0.	0.	0.	0.	4.085	28.165
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.264	3.793	4.105	3.695	11.893	14.877	102.573
	ISLAND TOTAL	9.534	5.355	5.388	4.849	15.593	25.127	173.247
6. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.826	0.779	0.701	2.307	2.307	15.905
	ISLAND TOTAL	0.	0.826	0.779	0.701	2.307	2.307	15.905
TOTAL THIS CASE		14.563	6.522	6.743	6.069	19.334	33.897	41.846
INDIRECT COSTS								0.291
								0.278
								0.570
								5.170
								2.068
								1.723
GRAND TOTAL								43.426

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20461

ECS STM141 PROCESS MEGAWATTS 58.07 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 659.
 STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6 1008. KW FUEL= 295495.

		*****COSTS - MILLIONS 1976\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLED		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.648	0.130	0.421	0.373	0.929	1.577	5.336
	3. LIMESTONE/DOLOMITE-U	0.397	0.236	0.209	0.168	0.633	1.029	3.484
	ISLAND TOTAL	1.044	0.366	0.630	0.567	1.562	2.607	8.821
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.289	8.297	9.367	8.430	26.094	34.383	116.356
	ISLAND TOTAL	8.289	8.297	9.367	8.430	26.094	34.383	116.356
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.579	0.	0.	0.	0.	6.579	22.263
	ISLAND TOTAL	6.579	0.	0.	0.	0.	6.579	22.263
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.921	0.872	0.765	2.577	2.577	8.722
	ISLAND TOTAL	0.	0.921	0.872	0.765	2.577	2.577	8.722
TOTAL THIS CASE		15.912	9.583	10.868	9.782	30.233	46.145	33.102
INDIRECT COSTS	SPARES						0.318	
	START UP						0.364	
	SPARES+STARTUP						0.682	
	CONTINGENCY						7.024	
	ENGINEERING SERVICES						2.810	
	A-E FEE						2.341	
GRAND TOTAL							59.002	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20821

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 250. PROCESS HEAT(BTU=10**6) 88.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU=10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD	FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.089	0.018	0.058	0.052	0.127	0.218	0.
	3. LIMESTONE/DOLOMITE-U	0.077	0.089	0.081	0.073	0.243	0.319	0.
	ISLAND TOTAL	0.165	0.107	0.138	0.125	0.370	0.536	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	2.677	0.689	0.681	0.613	1.963	4.640	0.
	ISLAND TOTAL	2.677	0.669	0.681	0.613	1.963	4.640	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.126	0.111	0.100	0.336	0.336	0.
	ISLAND TOTAL	0.	0.126	0.111	0.100	0.336	0.336	0.
TOTAL THIS CASE		2.842	0.902	0.930	0.837	2.670	5.512	0.
INDIRECT COSTS							0.057	
	SPARES						0.047	
	START UP						0.104	
	SPARES+STARTUP						0.842	
	CONTINGENCY						0.337	
	ENGINEERING SERVICES						0.281	
	A-E FEE							
GRAND TOTAL							7.075	

$$7.075 / 86 = 82.32 / 10^6 \text{ Btu/hr}$$

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PROCESS 20821

ECS DEADW3 PROCESS MEGAWATTS 6.04 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 86.
DIESEL-ADVANCED-3 SITE FUEL* RESIDUAL COGEN FUEL BTU*10**6= 56. KW FUEL* 16278.

		*****COSTS - MILLIONS 1978*****						
ISLAND	COMPONENT	MAJOR*	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.070	0.014	0.084	0.076	0.175	0.245	15.043
	ISLAND TOTAL	0.070	0.014	0.084	0.076	0.175	0.245	15.043
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA	2.905	0.288	0.288	0.259	0.835	3.740	229.785
	ISLAND TOTAL	2.905	0.288	0.288	0.259	0.835	3.740	229.785
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.208	0.431	0.658	0.592	1.681	1.889	116.050
	ISLAND TOTAL	0.208	0.431	0.658	0.592	1.681	1.889	116.050
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.179	0.157	0.141	0.477	0.477	29.327
	80. MASTER-CONTROL	0.151	0.023	0.038	0.534	0.094	0.245	15.059
	81. ELECTRIC-SWITCHGEAR-	0.	0.036	0.036	0.352	0.103	0.103	6.350
	82. INTERCONNECTING-PIPI	0.	0.073	0.073	0.068	0.213	0.213	13.077
	83. STRUCTURES-MISCELLAN	0.	0.159	0.141	0.127	0.427	0.427	26.212
	ISLAND TOTAL	0.161	0.470	0.444	0.400	1.315	1.465	90.024
TOTAL THIS CASE		3.335	1.203	1.475	1.327	4.005	7.340	81.538
INDIRECT COSTS								
	SPARES						0.067	
	START UP						0.060	
	SPARES+STARTUP						0.127	
	CONTINGENCY						1.120	
	ENGINEERING SERVICES						0.448	
	A-E FEE						0.373	
GRAND TOTAL							9.408	555

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20821

ECS DES0A3
DIESEL-SCA-3PROCESS MEGAWATTS 6.04
SITE FUEL= DISTILLAPROCESS TEMP. 250.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 86.
57. KW FUEL= 16729.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.071 0.071	0.014 0.014	0.085 0.085	0.076 0.076	0.176 0.176	0.246 0.246	14.723 14.723
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	2.132 2.132	0.405 0.405	0.405 0.405	0.365 0.365	1.175 1.175	3.307 3.307	197.700 197.700
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.208 0.208	0.430 0.430	0.657 0.657	0.591 0.591	1.678 1.678	1.886 1.886	112.749 112.749
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.151 0. 0. 0. 0.151	0.181 0.023 0.036 0.073 0.161 0.473	0.158 0.038 0.036 0.073 0.142 0.447	0.142 0.034 0.032 0.066 0.128 0.402	0.482 0.094 0.103 0.213 0.431 1.322	0.482 0.245 0.103 0.213 0.431 1.473	28.783 14.640 6.179 12.708 25.735 88.045
TOTAL THIS CASE		2.562	1.323	1.594	1.435	4.351	6.913	85.751
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.051 0.055 0.106	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.053 0.421 0.351	
GRAND TOTAL							8.844	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20821

ECS FCPADS PROCESS MEGAWATTS 6.04 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 86.
 FUEL-CL-PHOSACID-DS SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 57. KW FUEL= 16724.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.071 0.071	0.014 0.014	0.085 0.085	0.077 0.077	0.178 0.178	0.247 0.247	14.759 14.759
2. FUEL-UTILIZATION-CLE	20. REFORMER-SHIFTER-AND ISLAND TOTAL	0.774 0.774	0.077 0.077	0.116 0.116	0.104 0.104	0.298 0.298	1.072 1.072	64.095 64.095
3. ENERGY-CONVERSION	36. FUEL-CELLS-PHOSPHORI ISLAND TOTAL	0.973 0.973	0.097 0.097	0.146 0.146	0.131 0.131	0.375 0.375	1.348 1.348	80.603 80.603
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.209 0.983	0.432 0.509	0.659 0.776	0.594 0.698	1.685 1.983	1.694 2.966	113.236 177.331
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.151 0. 0. 0. 0.151	0.181 0.023 0.036 0.074 0.161 0.474	0.159 0.038 0.036 0.074 0.143 0.448	0.143 0.034 0.032 0.066 0.128 0.403	0.483 0.094 0.103 0.213 0.432 1.326	0.483 0.245 0.103 0.213 0.432 1.477	28.881 14.678 6.181 12.754 25.826 88.319
TOTAL THIS CASE		2.178	1.095	1.455	1.309	3.860	6.037	78.298
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.044 0.047 0.091	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.919 0.368 0.306	

GRAND TOTAL

7.722

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 20821

ECS GTR212 PROCESS MEGAWATTS 6.04 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 86.
 GT-60RE-12/2200D-AC SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 62. KW FUEL= 18300.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.071 0.071	0.014 0.014	0.085 0.085	0.076 0.076	0.175 0.175	0.246 0.246	13.442 13.442
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.536 1.536	0.241 0.241	0.135 0.135	0.122 0.122	0.498 0.498	2.034 2.034	111.142 111.142
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.193 0.193	0.172 0.172	0.369 0.369	0.332 0.332	0.872 0.872	1.065 1.065	58.199 58.199
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.198 0.198	0.411 0.411	0.627 0.627	0.564 0.564	1.601 1.601	1.800 1.800	98.335 98.335
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.048 0. 0. 0.048	0.080 0.007 0.012 0.047 0.160 0.285	0.052 0.012 0.012 0.047 0.142 0.264	0.047 0.011 0.011 0.042 0.128 0.238	0.159 0.030 0.034 0.135 0.430 0.788	0.159 0.079 0.034 0.135 0.430 0.836	8.687 4.301 1.864 7.386 23.480 45.697
TOTAL THIS CASE		2.047	1.123	1.480	1.332	3.934	5.981	72.778
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.041 0.046 0.087	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.910 0.364 0.303	
GRAN TOTAL							7.846	

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PROCESS 20821

ECS QTRA12 PROCESS MEGAWATTS 6.04 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 86.
 GT-85RE-12/2200D-AC SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 58. KW FUEL= 16869.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.071 0.071	0.014 0.014	0.085 0.085	0.076 0.076	0.175 0.175	0.245 0.245	14.553 14.553
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.653 1.653	0.259 0.259	0.146 0.146	0.131 0.131	0.535 0.535	2.188 2.188	129.719 129.719
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.178 0.178	0.157 0.157	0.341 0.341	0.307 0.307	0.805 0.805	0.982 0.982	58.188 58.188
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.208 0.208	0.426 0.426	0.650 0.650	0.585 0.585	1.862 1.862	1.867 1.867	110.697 110.697
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.049 0. 0. 0. 0.049	0.059 0.007 0.012 0.048 0.160 0.286	0.052 0.012 0.012 0.048 0.141 0.265	0.047 0.011 0.011 0.043 0.127 0.239	0.158 0.031 0.034 0.139 0.428 0.791	0.158 0.080 0.034 0.139 0.428 0.840	9.374 4.764 2.022 8.251 25.392 49.802
TOTAL THIS CASE		2.155	1.142	1.487	1.338	3.968	6.123	79.342
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.043 0.048 0.091	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.932 0.373 0.311	

GRAND TOTAL

7.829

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PROCESS 20821

ECS STM088 PROCESS MEGAWATTS 5.98 PROCESS TEMP. 250. PROCESS HEAT(BTU*10**6) 85.
STM-TURB-865/825F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 125. KW FUEL= 36686.

		*****COSTS - MILLIONS 1978*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.068	0.014	0.082	0.074	0.169	0.237	6.462
	ISLAND TOTAL	0.068	0.014	0.082	0.074	0.169	0.237	6.462
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.421	0.598	0.859	0.773	2.229	2.650	72.240
	ISLAND TOTAL	0.421	0.598	0.859	0.773	2.229	2.650	72.240
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	1.294	0.	0.	0.	0.	1.294	35.268
	ISLAND TOTAL	1.294	0.	0.	0.	0.	1.294	35.268
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.152	0.134	0.121	0.406	0.406	11.071
	ISLAND TOTAL	0.	0.152	0.134	0.121	0.406	0.406	11.071
TOTAL THIS CASE		1.783	0.763	1.074	0.967	2.804	4.587	26.358
INDIRECT COSTS								
	SPARES						0.036	
	START UP						0.036	
	SPARES+STARTUP						0.072	
	CONTINGENCY						0.699	
	ENGINEERING SERVICES						0.280	
	A-E FEE						0.233	
GRAND TOTAL							5.671	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 22601

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 341. PROCESS HEAT(BTU*10**6) 158.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.150	0.030	0.098	0.088	0.216	0.386	0.
	3. LIMESTONE/DOLOMITE-U	0.118	0.118	0.104	0.093	0.313	0.431	0.
	ISLAND TOTAL	0.269	0.148	0.201	0.181	0.528	0.797	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.058	2.308	2.545	2.290	7.143	9.202	0.
	ISLAND TOTAL	2.058	2.308	2.545	2.290	7.143	9.202	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.213	0.191	0.172	0.576	0.576	0.
	ISLAND TOTAL	0.	0.213	0.191	0.172	0.576	0.576	0.
TOTAL THIS CASE		2.327	2.667	2.937	2.644	8.248	10.575	0.
INDIRECT COSTS	SPARES						0.047	
	START UP						0.079	
	SPARES+STARTUP						0.126	
	CONTINGENCY						1.605	
	ENGINEERING SERVICES						0.842	
	A-E FEE						0.835	
GRAND TOTAL							13.483	

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PROCESS 22601

ECS DES0A3 PROCESS MEGAWATTS 6.20 PROCESS TEMP. 341. PROCESS HEAT(BTU*10**6) 156.
DIESEL-SOA-3 SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 59. KW FUEL= 17172.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.097 0.097	0.019 0.019	0.117 0.117	0.105 0.105	0.242 0.242	0.339 0.339	19.746 19.746
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	2.189 2.189	0.416 0.416	0.416 0.416	0.374 0.374	1.208 1.208	3.395 3.395	197.696 197.696
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.343 0.343	0.710 0.710	1.084 1.084	0.975 0.975	2.769 2.769	3.112 3.112	181.215 181.215
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.212 0. 0. 0. 0.212	0.289 0.032 0.037 0.119 0.258 0.734	0.253 0.053 0.037 0.119 0.233 0.694	0.227 0.048 0.033 0.107 0.210 0.625	0.769 0.133 0.106 0.344 0.701 2.053	0.769 0.345 0.106 0.344 0.701 2.265	44.776 20.071 6.164 20.049 40.837 131.897
TOTAL THIS CASE		2.841	1.860	2.310	2.079	6.269	9.111	121.093
INDIRECT COSTS								
	SPARES						0.057	
	START UP						0.070	
	SPARES+STARTUP						0.127	
	CONTINGENCY						1.386	
	ENGINEERING SERVICES						0.554	
	A-E FEE						0.462	
GRAND TOTAL							11.640	

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I SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 22601

ECS FCMDS PROCESS MEGAWATTS 6.20

PROCESS TEMP. 341.

PROCESS HEAT(BTU*10**6) 158.

FUEL-CL-MOLTCARB-DS

SITE FUEL= DISTILLA

COGEN FUEL BTU*10**6=

51. KW FUEL= 15046.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.095 0.095	0.019 0.019	0.114 0.114	0.103 0.103	0.236 0.236	0.332 0.332	22.034 22.034
2. FUEL-UTILIZATION-CLE	28. REFORMER-SHIFTER-AND ISLAND TOTAL	0.705 0.705	0.070 0.070	0.106 0.106	0.095 0.095	0.271 0.271	0.976 0.976	64.856 64.856
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA ISLAND TOTAL	1.211 1.211	0.121 0.121	0.182 0.182	0.163 0.163	0.466 0.466	1.677 1.677	111.434 111.434
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.341 1.046	0.706 0.776	1.078 1.183	0.970 1.065	2.754 3.025	3.095 4.070	205.674 270.529
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.211 0. 0. 0. 0.211	0.279 0.032 0.037 0.118 0.250 0.716	0.245 0.053 0.037 0.118 0.225 0.677	0.220 0.048 0.033 0.106 0.203 0.609	0.744 0.132 0.106 0.342 0.678 2.002	0.744 0.343 0.106 0.342 0.678 2.213	49.447 22.811 7.033 22.746 45.025 147.074
TOTAL THIS CASE		2.563	1.632	2.156	1.941	5.729	8.232	128.974
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.051 0.064 0.115	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.261 0.504 0.420	
GRAND TOTAL							10.592	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 22601

ECS STIRL
STIRLING-1472F

PROCESS MEGAWATTS

6.20

PROCESS TEMP.

341.

PROCESS HEAT(BTU*10**6)

150.

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

82. KW FUEL= 24048.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.175 0.175	0.035 0.035	0.114 0.114	0.103 0.103	0.252 0.252	0.427 0.427	17.761 17.761
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB 29. STIRLING-ENGINE-COMB 22. COAL-FIRED-BOILER ISLAND TOTAL	1.967 1.862 1.729 5.559	0.184 0.223 1.918 2.325	0.325 0.223 2.130 2.678	0.292 0.201 1.917 2.410	0.802 0.848 5.964 7.413	2.769 2.510 7.693 12.972	115.143 104.377 319.899 539.420
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.193 0. 0. 0. 0.193	0.279 0.029 0.037 0.104 0.249 0.697	0.244 0.048 0.037 0.104 0.224 0.657	0.219 0.043 0.033 0.093 0.202 0.591	0.742 0.120 0.106 0.301 0.676 1.945	0.742 0.313 0.106 0.301 0.676 2.138	30.834 13.027 4.402 12.512 28.098 88.894
TOTAL THIS CASE		5.927	3.058	3.449	3.104	9.610	15.537	129.062
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.119 0.124 0.243	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						2.367 0.947 0.789	
GRAND TOTAL							19.883	

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1 SE-PEG ADV. DES. ENGRG.

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 22601

ECS STM088 PROCESS MEGAWATTS 7.32 PROCESS TEMP. 341. PROCESS HEAT(BTU*10**6) 158.
 STM-TURB-865/825F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 215. KW FUEL= 63085.

*****COSTS - MILLIONS 1976\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	SPER-KW
		EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.171	0.034	0.111	0.100	0.245	0.415	6.581
	3. LIMESTONE/DOLOMITE-U	0.131	0.123	0.110	0.099	0.333	0.464	7.355
	ISLAND TOTAL	0.302	0.157	0.221	0.199	0.577	0.879	13.936
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	3.933	0.983	0.904	0.813	2.700	8.634	105.154
	ISLAND TOTAL	3.933	0.983	0.904	0.813	2.700	8.634	105.154
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	1.501	0.	0.	0.	0.	1.501	23.796
	ISLAND TOTAL	1.501	0.	0.	0.	0.	1.501	23.796
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.242	0.218	0.198	0.656	0.656	10.405
	ISLAND TOTAL	0.	0.242	0.218	0.198	0.656	0.656	10.405
TOTAL THIS CASE		5.736	1.383	1.343	1.208	3.934	9.670	19.156
INDIRECT COSTS	SPARES						0.116	
	START UP						0.085	
	SPARES+STARTUP						0.199	
	CONTINGENCY						1.480	
	ENGINEERING SERVICES						0.592	
	A-E FEE						0.493	
GRAND TOTAL							12.436	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 24211

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 353. PROCESS HEAT(BTU*10**6) 30.
NO COGENERATI SITE FUEL= RESIDUAL COGEN FUEL BTU*10**3= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL FUEL	\$PER-KW
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.033 0.033	0.007 0.007	0.039 0.039	0.035 0.035	0.081 0.081	0.114 0.114	0. 0.
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.129 0.129	0.268 0.268	0.408 0.408	0.368 0.368	1.043 1.043	1.173 1.173	0. 0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.	0.051 0.051	0.043 0.043	0.039 0.039	0.132 0.132	0.132 0.132	0. 0.
TOTAL THIS CASE		0.162	0.325	0.491	0.442	1.257	1.419	0.
INDIRECT COSTS								
							0.003	
							0.010	
							0.013	
							0.215	
							0.086	
							0.072	
GRAND TOTAL							1.804	

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24211

ECS STIRL PROCESS MEGAWATTS 1.50 PROCESS TEMP. 353. PROCESS HEAT(BTU*10**6) 30.
 STIRLING-1472F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 20. KW FUEL= 3881.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.037 0.037	0.007 0.007	0.045 0.045	0.040 0.040	0.092 0.092	0.130 0.130	22.027 22.027
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB 29. STIRLING-ENGINE-COMB 21. OIL-FIRED-BOILER ISLAND TOTAL	0.025 0.461 0.102 0.588	0.003 0.059 0.212 0.274	0.003 0.059 0.323 0.386	0.003 0.053 0.291 0.347	0.009 0.172 0.828 1.007	0.034 0.633 0.928 1.595	5.657 107.601 157.814 271.273
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.068 0. 0. 0. 0.068	0.071 0.010 0.010 0.024 0.062 0.176	0.062 0.017 0.010 0.024 0.053 0.165	0.056 0.015 0.009 0.021 0.047 0.149	0.188 0.042 0.029 0.069 0.161 0.490	0.188 0.110 0.029 0.069 0.161 0.557	31.955 18.730 4.934 11.710 27.459 94.789
TOTAL THIS CASE		0.693	0.458	0.595	0.536	1.589	2.282	91.112
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.014 0.017 0.031	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.347 0.139 0.116	
GRAND TOTAL							2.915	

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I SE-PEO ADV. DES. ENGRG.

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24361

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 406. PROCESS HEAT(BTU*10**6) 75.
 N O C O G E N E R A T I SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1976\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.079	0.016	0.051	0.046	0.113	0.192	0.
	3. LIMESTONE/DOLOMITE-U	0.069	0.084	0.076	0.069	0.229	0.299	0.
	ISLAND TOTAL	0.148	0.100	0.128	0.115	0.342	0.491	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	2.470	0.617	0.640	0.576	1.834	4.304	0.
	ISLAND TOTAL	2.470	0.617	0.640	0.576	1.834	4.304	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.112	0.098	0.088	0.298	0.298	0.
	ISLAND TOTAL	0.	0.112	0.098	0.088	0.298	0.298	0.
TOTAL THIS CASE		2.618	0.830	0.866	0.779	2.474	5.092	0.
INDIRECT COSTS	SPARES						0.052	
	START UP						0.043	
	SPARES+STARTUP						0.095	
	CONTINGENCY						0.778	
	ENGINEERING SERVICES						0.311	
	A-E FEE						0.259	
GRAND TOTAL							6.537	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24361

ECS STIRL PROCESS MEGAWATTS 3.00 PROCESS TEMP. 406. PROCESS HEAT(BTU=10**6) 75.
 STIRLING-1472F SITE FUEL= RESIDUAL COGEN FUEL BTU=10**6= 42. KW FUEL= 12393.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.062 0.062	0.012 0.012	0.074 0.074	0.067 0.067	0.154 0.154	0.216 0.216	17.398 17.398
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMP	0.050	0.006	0.006	0.005	0.017	0.067	5.405
	29. STIRLING-ENGINE-COMP	0.960	0.115	0.115	0.104	0.334	1.294	104.377
	21. OIL-FIRED-BOILER	0.186	0.385	0.588	0.529	1.503	1.689	135.303
	ISLAND TOTAL	1.195	0.506	0.709	0.638	1.854	3.050	246.086
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.149	0.130	0.117	0.396	0.396	31.974
	80. MASTER-CONTROL	0.118	0.018	0.030	0.027	0.074	0.192	15.520
	81. ELECTRIC-SWITCHGEAR	0.	0.019	0.019	0.017	0.055	0.055	4.406
	82. INTERCONNECTING-PIPI	0.	0.052	0.052	0.047	0.151	0.151	12.199
	83. STRUCTURES-MISCELLAN	0.	0.132	0.116	0.104	0.351	0.351	28.353
	ISLAND TOTAL	0.118	0.369	0.346	0.312	1.027	1.146	92.452
TOTAL THIS CASE		1.376	0.888	1.130	1.017	3.035	4.411	82.073
INDIRECT COSTS	SPARES						0.026	
	START UP						0.034	
	SPARES+STARTUP						0.061	
	CONTINGENCY						0.671	
	ENGINEERING SERVICES						0.268	
	A-E FEE						0.224	
GRAND TOTAL							5.635	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24921

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 406. PROCESS HEAT(BTU*10**6) 37.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.043	0.009	0.028	0.028	0.061	0.104	0.
	3. LIMESTONE/DOLOMITE-U	0.042	0.063	0.057	0.051	0.171	0.213	0.
	ISLAND TOTAL	0.085	0.071	0.085	0.078	0.232	0.317	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	1.630	0.408	0.465	0.419	1.291	2.922	0.
	ISLAND TOTAL	1.630	0.408	0.465	0.419	1.291	2.922	0.
6. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.061	0.052	0.047	0.159	0.159	0.
	ISLAND TOTAL	0.	0.061	0.052	0.047	0.159	0.159	0.
TOTAL THIS CASE		1.715	0.540	0.602	0.542	1.683	3.398	0.
INDIRECT COSTS								
	SPARES						0.034	
	START UP						0.029	
	SPARES+STARTUP						0.063	
	CONTINGENCY						0.519	
	ENGINEERING SERVICES						0.208	
	A-E FEE						0.173	
GRAND TOTAL							4.381	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24921

ECS GTSGAR PROCESS MEGAWATTS 0.41

PROCESS TEMP. 408.

PROCESS HEAT(BTU*10**6) 37.

GT-HRSG-10/1750R-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

5. KW FUEL= 1424.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.038 0.038	0.008 0.008	0.046 0.046	0.041 0.041	0.095 0.095	0.133 0.133	93.170 93.170
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.172 0.172	0.038 0.038	0.020 0.020	0.018 0.018	0.077 0.077	0.249 0.249	175.125 175.125
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.050 0.050	0.047 0.047	0.122 0.122	0.109 0.109	0.278 0.278	0.328 0.328	230.563 230.563
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.142 0.142	0.294 0.294	0.449 0.449	0.404 0.404	1.147 1.147	1.289 1.289	905.037 905.037
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.024 0. 0. 0. 0.024	0.024 0.004 0.001 0.018 0.064 0.110	0.021 0.006 0.001 0.018 0.055 0.101	0.019 0.006 0.001 0.016 0.049 0.091	0.084 0.015 0.003 0.052 0.168 0.302	0.084 0.040 0.003 0.052 0.168 0.326	45.104 27.911 2.074 36.205 117.623 228.916
TOTAL THIS CASE		0.427	0.497	0.737	0.664	1.898	2.325	465.944
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.009 0.017 0.025	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.353 0.141 0.118	
GRA TOTAL							2.962	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24921

ECS STIRL PROCESS MEGAWATTS 5.39 PROCESS TEMP. 406. PROCESS HEAT(BTU*10**6) 37.
 STIRLING-1472F SITE FUEL= COAL COGEN FUEL BTU*10**6= 76. KW FUEL= 22266.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.069 0.069	0.014 0.014	0.045 0.045	0.041 0.041	0.099 0.099	0.169 0.169	7.580 7.580
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB	1.867	0.178	0.312	0.281	0.771	2.638	118.475
	29. STIRLING-ENGINE-COMB	1.724	0.207	0.207	0.186	0.600	2.324	104.377
	ISLAND TOTAL	3.591	0.385	0.519	0.467	1.371	4.962	222.852
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.112	0.098	0.088	0.298	0.298	13.380
	80. MASTER-CONTROL	0.084	0.013	0.021	0.019	0.052	0.136	6.124
	81. ELECTRIC-SWITCHGEAR-	0.	0.032	0.032	0.029	0.093	0.093	4.184
	82. INTERCONNECTING-PIPI	0.	0.032	0.032	0.029	0.093	0.093	4.180
	83. STRUCTURES-MISCELLAN	0.	0.098	0.086	0.077	0.261	0.261	11.723
	ISLAND TOTAL	0.084	0.287	0.269	0.242	0.798	0.882	39.592
TOTAL THIS CASE		3.744	0.686	0.833	0.749	2.268	6.012	33.659
INDIRECT COSTS	SPARES						0.075	
	START UP						0.053	
	SPARES+STARTUP						0.128	
	CONTINGENCY						0.921	
	ENGINEERING SERVICES						0.368	
	A-E FEE						0.307	
GRAND TOTAL							7.736	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

I SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24921

ECS STIRL PROCESS MEGAWATTS 5.00 PROCESS TEMP. 406. PROCESS HEAT(BTU*10**6) 37.
 STIRLING-1472F SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 70. KW FUEL= 20655.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.050 0.050	0.010 0.010	0.060 0.060	0.054 0.054	0.124 0.124	0.174 0.174	8.436 8.436
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB 29. STIRLING-ENGINE-COMB 21. OIL-FIRED-BOILER ISLAND TOTAL	0.080 1.599 0.029 1.709	0.010 0.192 0.061 0.262	0.010 0.192 0.093 0.294	0.009 0.173 0.084 0.265	0.028 0.557 0.237 0.822	0.108 2.156 0.266 2.530	5.219 104.377 12.902 122.498
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.083 0. 0. 0. 0.083	0.109 0.012 0.030 0.032 0.096 0.279	0.095 0.021 0.030 0.032 0.083 0.261	0.086 0.019 0.027 0.028 0.075 0.235	0.290 0.052 0.087 0.092 0.254 0.775	0.290 0.135 0.087 0.092 0.254 0.858	14.044 6.538 4.212 4.444 12.291 41.529
TOTAL THIS CASE		1.842	0.551	0.615	0.554	1.720	3.562	26.812
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.037 0.030 0.067	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.644 0.218 0.181	
GRAND TOTAL							4.573	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 24921

ECS STIRL PROCESS MEGAWATTS 5.00 PROCESS TEMP. 406. PROCESS HEAT(BTU*10**6) 37.
 STIRLING-1472F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 70. KW FUEL= 20655.

		*****COSTS - MILLIONS 1978*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLED		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.050	0.010	0.060	0.054	0.124	0.174	8.436
	ISLAND TOTAL	0.050	0.010	0.060	0.054	0.124	0.174	8.436
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB	0.083	0.010	0.010	0.009	0.029	0.112	5.405
	29. STIRLING-ENGINE-COMB	1.599	0.192	0.192	0.173	0.557	2.156	104.377
	21. OIL-FIRED-BOILER	0.029	0.061	0.093	0.084	0.237	0.266	12.902
	ISLAND TOTAL	1.712	0.263	0.295	0.265	0.823	2.534	122.684
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.109	0.095	0.086	0.290	0.290	14.044
	80. MASTER-CONTROL	0.083	0.012	0.021	0.019	0.052	0.135	6.538
	81. ELECTRIC-SWITCHGEAR-	0.	0.030	0.030	0.027	0.087	0.087	4.212
	82. INTERCONNECTING-PIPI	0.	0.032	0.032	0.028	0.092	0.092	4.444
	83. STRUCTURES-MISCELLAN	0.	0.096	0.083	0.075	0.254	0.254	12.291
	ISLAND TOTAL	0.083	0.279	0.261	0.235	0.773	0.858	41.529
TOTAL THIS CASE		1.845	0.552	0.616	0.554	1.721	3.566	26.827
INDIRECT COSTS	SPARES						0.037	
	START UP						0.030	
	SPARES+STARTUP						0.067	
	CONTINGENCY						0.545	
	ENGINEERING SERVICES						0.218	
	A-E FEE						0.182	
GRAND TOTAL							4.578	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26212

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 780.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTA'LD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.597	0.119	0.388	0.349	0.657	1.454	0.
	3. LIMESTONE/DOLOMITE-U	0.371	0.227	0.201	0.181	0.608	0.979	0.
	ISLAND TOTAL	0.968	0.347	0.589	0.530	1.465	2.433	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	7.210	8.377	9.033	8.130	25.539	32.749	0.
	ISLAND TOTAL	7.210	8.377	9.033	8.130	25.539	32.749	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.849	0.801	0.721	2.371	2.371	0.
	ISLAND TOTAL	0.	0.849	0.801	0.721	2.371	2.371	0.
TOTAL THIS CASE		8.178	9.572	10.423	9.381	29.375	37.553	0.
INDIRECT COSTS	SPARES						0.164	
	START UP						0.282	
	SPARES+STARTUP						0.445	
	CONTINGENCY						5.700	
	ENGINEERING SERVICES						2.280	
	A-E FEE						1.900	
GRAND TOTAL							47.878	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 26212

ECS GTSOAR PROCESS MEGAWATTS 50.00 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 780.
 GT-HRSQ-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 588. KW FUEL= 172389.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.254 0.254	0.051 0.051	0.305 0.305	0.275 0.275	0.631 0.631	0.665 0.665	5.134 5.134
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	8.408 8.408	0.930 0.930	0.550 0.550	0.495 0.495	1.978 1.978	10.384 10.384	60.235 60.235
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.719 0.719	0.614 0.614	1.107 1.107	0.996 0.996	2.717 2.717	3.436 3.436	19.933 19.933
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.952 1.952	2.069 2.069	3.649 3.649	3.285 3.285	9.003 9.003	10.954 10.954	63.544 63.544
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.190 0. 0. 0. 0.190	0.388 0.028 0.081 0.028 1.089 1.898	0.340 0.047 0.081 0.320 1.029 1.817	0.308 0.043 0.073 0.288 0.926 1.638	1.034 0.119 0.234 0.929 3.035 5.350	1.034 0.309 0.234 0.929 3.035 5.540	5.998 1.790 1.360 5.388 17.603 32.138
TOTAL THIS CASE		11.523	5.562	7.429	6.686	19.677	31.200	38.785
INDIRECT COSTS							0.230 0.245 0.478	
							4.751 1.901 1.544	
GRAND TOTAL							39.911	

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26212

ECS HEGT00 PROCESS MEGAWATTS 50.00
HELIUM-GT-00-REGEN SITE FUEL= COAL-AFBPROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 780.
COGEN FUEL BTU*10**6= 969. KW FUEL= 284049.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.823 0.823	0.165 0.165	0.535 0.535	0.481 0.481	1.181 1.181	2.004 2.004	7.054 7.054
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE ISLAND TOTAL	21.400 21.400	8.346 8.346	8.420 8.420	8.778 8.778	20.544 20.544	41.944 41.944	147.665 147.665
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	9.560 9.560	3.728 3.728	2.868 2.868	2.581 2.581	9.178 9.178	18.738 18.738	65.966 65.966
5. HEAT-SINK	50. COOLING-TOWERS-WET-I ISLAND TOTAL	0.860 0.860	0.129 0.129	0.430 0.430	0.387 0.387	0.946 0.946	1.806 1.806	6.358 6.358
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER ISLAND TOTAL	3.105 24.505	3.573 11.919	3.876 10.296	3.489 9.267	10.939 31.483	14.044 55.988	49.442 197.107
TOTAL THIS CASE		35.748	15.941	14.129	12.716	42.787	78.535	44.788
INDIRECT COSTS							0.715 0.858 1.373	
							11.986 4.754 3.995	
GRAND TOTAL							100.684	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PAGE 37

PROCESS 26212

ECS PFBSTM PROCESS MEGAWATTS 76.62 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 780.
PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU*10**6= 1236. KW FUEL= 362105.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.772	0.154	0.502	0.452	1.108	1.880	5.192
	3. LIMESTONE/DOLOMITE-U	0.459	0.258	0.227	0.204	0.889	1.147	3.169
	ISLAND TOTAL	1.231	0.412	0.729	0.656	1.797	3.028	8.361
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	18.998	3.609	2.659	2.393	8.662	27.658	76.382
	ISLAND TOTAL	18.998	3.609	2.659	2.393	8.662	27.658	76.382
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-OE	6.644	1.935	1.312	1.181	4.428	11.073	30.579
	ISLAND TOTAL	6.644	1.935	1.312	1.181	4.428	11.073	30.579
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	5.532	0.	0.	0.	0.	5.532	15.277
	ISLAND TOTAL	5.532	0.	0.	0.	0.	5.532	15.277
TOTAL THIS CASE		32.403	5.956	4.701	4.231	14.867	47.290	11.683
INDIRECT COSTS							0.648	
	SPARES						0.431	
	START UP						1.079	
	SPARES+STARTUP							
	CONTINGENCY						7.255	
	ENGINEERING SERVICES						2.902	
	A-E FEE						2.418	
GRAND TOTAL							60.945	

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 26212

ECS PFBSTM PROCESS MEGAWATTS 80.00 PROCESS TEMP. 368. PROCESS HEAT(BTU*10**6) 780.
PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU*10**6= 808. KW FUEL= 236298.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.712	0.142	0.463	0.417	1.022	1.734	7.338
	3. LIMESTONE/DOLOMITE-U	0.429	0.248	0.218	0.197	0.862	1.091	4.619
	ISLAND TOTAL	1.141	0.390	0.681	0.613	1.684	2.825	11.957
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	14.095	2.678	1.973	1.776	6.427	20.523	86.851
	ISLAND TOTAL	14.095	2.678	1.973	1.776	6.427	20.523	86.851
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	4.926	1.638	1.108	0.997	3.743	8.689	36.688
	ISLAND TOTAL	4.926	1.638	1.108	0.997	3.743	8.689	36.688
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.157	0.	0.	0.	0.	4.157	17.591
	ISLAND TOTAL	4.157	0.	0.	0.	0.	4.157	17.591
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.678	3.294	3.584	3.226	10.105	12.981	54.935
	ISLAND TOTAL	16.972	5.972	5.558	5.002	18.532	33.504	141.786
TOTAL THIS CASE		27.196	8.000	7.347	6.612	21.980	49.155	27.984
INDIRECT COSTS	SPARES						0.544	
	START UP						0.425	
	SPARES+STARTUP						0.969	
	CONTINGENCY						7.519	
	ENGINEERING SERVICES						3.007	
	A-E FEE						2.506	
GRAND TOTAL							63.157	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26212

ECS STM141 PROCESS MEGAWATTS 47.17 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 780.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1107. KW FUEL= 324399.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.702	0.140	0.456	0.411	1.008	1.710	5.270
	3. LIMESTONE/DOLOMITE-U	0.424	0.246	0.217	0.195	0.658	1.082	3.335
	ISLAND TOTAL	1.126	0.386	0.673	0.606	1.688	2.792	8.606
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	13.351	3.338	2.699	2.430	8.467	21.817	67.255
	ISLAND TOTAL	13.351	3.338	2.699	2.430	8.467	21.817	67.255
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	5.724	0.	0.	0.	0.	5.724	17.646
	ISLAND TOTAL	5.724	0.	0.	0.	0.	5.724	17.646
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.998	0.948	0.853	2.800	2.800	8.630
	ISLAND TOTAL	0.	0.998	0.948	0.853	2.800	2.800	8.630
TOTAL THIS CASE		20.201	4.722	4.321	3.889	12.932	33.133	11.988
INDIRECT COSTS	SPARES						0.404	
	START UP						0.292	
	SPARES+STARTUP						0.696	
	CONTINGENCY						5.074	
	ENGINEERING SERVICES						2.030	
	A-E FEE						1.691	
GRAND TOTAL							42.825	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26212

ECS STM141 PROCESS MEGAWATTS 47.17

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 780.

STM-TURB-1465/1000F

SITE FUEL= COAL-FGD

COGEN FUEL BTU*10**6=

1107. KW FUEL= 324399.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.702	0.140	0.456	0.411	1.008	1.710	5.270
	3. LIMESTONE/DOLOMITE-U	0.424	0.246	0.217	0.195	0.658	1.082	3.335
	ISLAND TOTAL	1.126	0.386	0.673	0.606	1.668	2.792	8.606
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.826	8.852	9.976	8.978	27.806	36.634	112.930
	ISLAND TOTAL	8.826	8.852	9.976	8.978	27.806	36.634	112.930
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	5.724	0.	0.	0.	0.	5.724	17.646
	ISLAND TOTAL	5.724	0.	0.	0.	0.	5.724	17.646
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.998	0.948	0.853	2.800	2.800	8.630
	ISLAND TOTAL	0.	0.998	0.948	0.853	2.800	2.800	8.630
TOTAL THIS CASE		15.679	10.237	11.597	10.436	32.271	47.950	32.175
INDIRECT COSTS								
	SPARES						0.314	
	START UP						0.375	
	SPARES+STARTUP						0.689	
	CONTINGENCY						7.296	
	ENGINEERING SERVICES						2.918	
	A-E FEE						2.432	
GRAND TOTAL							61.285	189

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26214

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 610.
 NO COGENERATION SITE FUEL= COAL-FOD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.483	0.097	0.314	0.282	0.693	1.175	0.
	3. LIMESTONE/DOLOMITE-U	0.311	0.205	0.181	0.163	0.549	0.860	0.
	ISLAND TOTAL	0.794	0.301	0.495	0.446	1.242	2.036	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	6.191	7.123	7.728	6.955	21.805	27.996	0.
	ISLAND TOTAL	6.191	7.123	7.728	6.955	21.805	27.996	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.686	0.642	0.578	1.907	1.907	0.
	ISLAND TOTAL	0.	0.686	0.642	0.578	1.907	1.907	0.
TOTAL THIS CASE		6.984	8.110	8.865	7.979	24.954	31.938	0.
INDIRECT COSTS							0.140	
	SPARES						0.240	
	START UP						0.379	
	SPARES+STARTUP						4.848	
	CONTINGENCY						1.939	
	ENGINEERING SERVICES						1.616	
	A-E FEE							
GRAND TOTAL							40.720	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26214

ECS PFBSTM PROCESS MEGAWATTS 62.19

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 610.

PFB-STMTB-1465/1000F

SITE FUEL= COAL-PFB

COGEN FUEL BTU*10**6=

975. KW FUEL= 285707.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.629	0.126	0.409	0.368	0.903	1.532	5.362
	3. LIMESTONE/DOLOMITE-U	0.387	0.233	0.206	0.185	0.624	1.011	3.539
	ISLAND TOTAL	1.016	0.359	0.615	0.553	1.527	2.543	8.901
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	16.096	3.058	2.253	2.028	7.340	23.436	82.027
	ISLAND TOTAL	16.096	3.058	2.253	2.028	7.340	23.436	82.027
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	5.627	1.764	1.195	1.075	4.034	9.661	33.816
	ISLAND TOTAL	5.627	1.764	1.195	1.075	4.034	9.661	33.816
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.874	0.	0.	0.	0.	4.874	17.058
	ISLAND TOTAL	4.874	0.	0.	0.	0.	4.874	17.058
TOTAL THIS CASE		27.613	5.181	4.063	3.657	12.901	40.514	12.798
INDIRECT COSTS	SPARES						0.552	
	START UP						0.369	
	SPARES+STARTUP						0.921	
	CONTINGENCY						6.215	
	ENGINEERING SERVICES						2.486	
	A-E FEE						2.072	
GRAND TOTAL							52.208	

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PROCESS 26214

ECS STM088 PROCESS MEGAWATTS 28.77 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 610.
STM-TURB-865/825F SITE FUEL* COAL-AFB COGEN FUEL BTU*10**6= 833. KW FUEL= 244140.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.549	0.110	0.357	0.321	0.788	1.337	5.478
	3. LIMESTONE/DOLOMITE-U	0.346	0.218	0.193	0.174	0.584	0.930	3.811
	ISLAND TOTAL	0.895	0.328	0.550	0.495	1.373	2.268	9.289
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	11.811	2.903	2.440	2.196	7.539	19.150	78.439
	ISLAND TOTAL	11.811	2.903	2.440	2.196	7.539	19.150	78.439
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.104	0.	0.	0.	0.	4.104	16.810
	ISLAND TOTAL	4.104	0.	0.	0.	0.	4.104	16.810
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.781	0.735	0.661	2.176	2.176	8.914
	ISLAND TOTAL	0.	0.781	0.735	0.661	2.176	2.176	8.914
TOTAL THIS CASE		16.811	4.011	3.724	3.352	11.088	27.698	13.729
INDIRECT COSTS							0.332	
	SPARES						0.243	
	START UP						0.576	
	SPARES+STARTUP							
	CONTINGENCY						4.241	
	ENGINEERING SERVICES						1.696	
	A-E FEE						1.414	
GRAND TOTAL							35.625	

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PROCESS 26214

ECS STM141 PROCESS MEGAWATTS 29.00 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 610.
STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 650. KW FUEL= 190440.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.550	0.110	0.357	0.322	0.789	1.339	7.029
	3. LIMESTONE/DOLOMITE-U	0.346	0.218	0.193	0.174	0.585	0.931	4.889
	ISLAND TOTAL	0.896	0.328	0.550	0.495	1.374	2.270	11.918
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	4.919	4.948	5.559	5.003	15.510	20.429	107.272
	ISLAND TOTAL	4.919	4.948	5.559	5.003	15.510	20.429	107.272
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.133	0.	0.	0.	0.	4.133	21.701
	ISLAND TOTAL	4.133	0.	0.	0.	0.	4.133	21.701
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.047	2.294	2.530	2.277	7.101	9.148	48.035
	ISLAND TOTAL	6.966	7.242	8.089	7.280	22.611	29.576	155.306
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.781	0.735	0.662	2.179	2.179	11.439
	ISLAND TOTAL	0.	0.781	0.735	0.662	2.179	2.179	11.439
TOTAL THIS CASE		11.995	8.351	9.374	8.437	26.163	38.157	44.303
INDIRECT COSTS	SPARES						0.240	
	START UP						0.297	
	SPARES+STARTUP						0.537	
	CONTINGENCY						5.604	
	ENGINEERING SERVICES						2.322	
	A-E FEE						1.935	
GRAND TOTAL							48.755	

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ECS STM141 PROCESS MEGAWATTS 29.00 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 610.
 STM-TURB-1465/1000F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 650. KW FUEL= 190440.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.205 0.205	0.041 0.041	0.246 0.246	0.221 0.221	0.508 0.508	0.712 0.712	3.741 3.741
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.960 1.960	1.686 1.686	2.745 2.745	2.470 2.470	6.901 6.901	8.861 8.861	46.529 46.529
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA ISLAND TOTAL	4.133 4.133	0. 0.	0. 0.	0. 0.	0. 0.	4.133 4.133	21.701 21.701
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.356 2.316	0.737 2.423	1.125 3.869	1.012 3.482	2.874 9.774	3.229 12.090	16.958 63.487
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.	0.781 0.781	0.735 0.735	0.662 0.662	2.179 2.179	2.179 2.179	11.439 11.439
TOTAL THIS CASE		6.654	3.245	4.850	4.365	12.460	19.114	22.922
INDIRECT COSTS							0.133	
							0.147	
							0.281	
							2.909	
							1.164	
							0.970	
GRAND TOTAL							24.437	

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PROCESS 26214

ECS TISTMT PROCESS MEGAWATTS 29.00 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 610.
TI-STMTB-1465/1000F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 371. KW FUEL= 108848.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.205 0.205	0.041 0.041	0.246 0.246	0.222 0.222	0.509 0.509	0.714 0.714	6.559 6.559
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/OE 30. STEAM-TURBINE-GENERA ISLAND TOTAL	10.043 2.499 12.542	12.332 0. 12.332	11.967 0. 11.967	10.770 0. 10.770	35.069 0. 35.069	45.112 2.499 47.611	414.451 22.961 437.412
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.677 1.677	1.778 1.778	3.136 3.136	2.823 2.823	7.737 7.737	9.414 9.414	86.487 86.487
TOTAL THIS CASE		14.425	14.151	15.349	13.814	43.314	57.739	126.915
INDIRECT COSTS	SPARES						0.263	
	START UP						0.439	
	SPARES+STARTUP						0.728	
	CONTINGENCY						8.770	
	ENGINEERING SERVICES						3.508	
	A-E FEE						2.923	
GRAND TOTAL							73.668	

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PROCESS 26216

ECS ONOCGN . PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 307.
N O C O G E N E R A T I SITE FUEL= COAL-FOD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD	FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.267	0.053	0.173	0.156	0.383	0.649	0.
	3. LIMESTONE/DOLOMITE-U	0.190	0.153	0.137	0.123	0.413	0.603	0.
	ISLAND TOTAL	0.457	0.206	0.310	0.279	0.795	1.252	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.108	3.577	3.880	3.492	10.948	14.056	0.
	ISLAND TOTAL	3.108	3.577	3.880	3.492	10.948	14.056	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.379	0.347	0.312	1.038	1.038	0.
	ISLAND TOTAL	0.	0.379	0.347	0.312	1.038	1.038	0.
TOTAL THIS CASE		3.565	4.162	4.537	4.083	12.782	16.347	0.
INDIRECT COSTS	SPARES						0.071	
	START UP						0.123	
	SPARES+STARTUP						0.194	
	CONTINGENCY						2.481	
	ENGINEERING SERVICES						0.992	
	A-E FEE						0.827	
GRAND TOTAL							20.841	

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PROCESS 26216

ECS QTSOAD PROCESS MEGAWATTS 20.00
GT-HRSG-10/2000D-AC SITE FUEL=

DISTILLA

PROCESS TEMP. 366.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 307.
234. KW FUEL= 68483.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.146 0.146	0.029 0.029	0.176 0.176	0.158 0.158	0.363 0.363	0.510 0.510	7.442 7.442
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	2.892 2.892	0.375 0.376	0.217 0.217	0.195 0.195	0.788 0.788	3.680 3.680	53.739 53.739
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.435 0.435	0.379 0.379	0.743 0.743	0.669 0.669	1.790 1.790	2.225 2.225	32.484 32.484
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.413 0.413	0.854 0.854	1.304 1.304	1.174 1.174	3.333 3.333	3.745 3.745	54.690 54.690
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.104 0. 0. 0.104	0.173 0.016 0.035 0.136 0.474 0.834	0.151 0.026 0.035 0.136 0.438 0.787	0.138 0.023 0.032 0.123 0.394 0.708	0.461 0.065 0.102 0.396 1.306 2.329	0.461 0.169 0.102 0.396 1.306 2.433	6.729 2.461 1.484 5.778 19.075 35.527
TOTAL THIS CASE		3.990	2.472	3.227	2.904	8.603	12.593	42.405
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.080 0.097 0.177	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.915 0.766 0.638	
OP D TOTAL							16.090	

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PROCESS 26216

ECS ST1010 PROCESS MEGAWATTS 20.00
ST10-10-16/2200F-AC SITE FUEL= RESIDUALPROCESS TEMP. 366.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 307.
190. KW FUEL= 55687.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.156 0.156	0.031 0.031	0.187 0.187	0.168 0.168	0.387 0.387	0.543 0.543	9.743 9.743
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	3.500 3.500	0.385 0.385	0.280 0.280	0.252 0.252	0.917 0.917	4.417 4.417	79.319 79.319
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.232 0.232	0.205 0.205	0.435 0.435	0.392 0.392	1.032 1.032	1.264 1.264	22.700 22.700
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.055 3.555	0.028 0.413	0.033 0.313	0.030 0.282	0.090 1.007	0.146 4.563	2.616 81.935
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.007 1.007	1.067 1.067	1.883 1.883	1.694 1.694	4.644 4.644	5.651 5.651	101.484 101.484
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.089 0. 0. 0. 0.089	0.144 0.013 0.027 0.124 0.521 0.828	0.126 0.022 0.027 0.124 0.482 0.781	0.113 0.020 0.024 0.111 0.434 0.703	0.383 0.056 0.077 0.359 1.437 2.311	0.383 0.145 0.077 0.359 1.437 2.400	6.870 2.603 1.383 6.440 25.811 43.107
TOTAL THIS CASE		5.039	2.544	3.599	3.239	9.382	14.421	58.166
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.101 0.112 0.213	
	CONTINGENCY						2.195	

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PROCESS 26216

ECS STM141 PROCESS MEGAWATTS 18.13

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 307.

STM-TURB-1465/1000F

SITE FUEL= COAL-AFB

COGEN FUEL BTU*10**6=

434. KW FUEL= 127164.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.313	0.063	0.203	0.183	0.448	0.761	5.984
	3. LIMESTONE/DOLomite-U	0.217	0.163	0.147	0.133	0.445	0.662	5.209
	ISLAND TOTAL	0.530	0.228	0.350	0.315	0.894	1.423	11.193
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	5.784	1.446	1.209	1.088	3.743	9.527	74.920
	ISLAND TOTAL	5.784	1.446	1.209	1.088	3.743	9.527	74.920
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	3.017	0.	0.	0.	0.	3.017	23.728
	ISLAND TOTAL	3.017	0.	0.	0.	0.	3.017	23.728
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.444	0.409	0.368	1.221	1.221	9.603
	ISLAND TOTAL	0.	0.444	0.409	0.368	1.221	1.221	9.603
TOTAL THIS CASE		9.331	2.118	1.968	1.771	5.858	15.189	13.930
INDIRECT COSTS	SPARES						0.187	
	START UP						0.134	
	SPARES+STARTUP						0.321	
	CONTINGENCY						2.326	
	ENGINEERING SERVICES						0.931	
	A-E FEE						0.775	
GRAND TOTAL							19.542	

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PROCESS 26216

ECS STM141 PROCESS MEGAWATTS 18.13 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 307.
STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 434. KW FUEL= 127164.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.313	0.063	0.203	0.183	0.448	0.761	5.984
	3. LIMESTONE/DOLOMITE-U	0.217	0.165	0.147	0.133	0.445	0.662	5.209
	ISLAND TOTAL	0.530	0.228	0.350	0.316	0.894	1.423	11.193
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.745	3.738	4.232	3.809	11.779	15.525	122.084
	ISLAND TOTAL	3.745	3.738	4.232	3.809	11.779	15.525	122.084
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	3.017	0.	0.	0.	0.	3.017	23.728
	ISLAND TOTAL	3.017	0.	0.	0.	0.	3.017	23.728
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.444	0.409	0.368	1.221	1.221	9.603
	ISLAND TOTAL	0.	0.444	0.409	0.368	1.221	1.221	9.603
TOTAL THIS CASE		7.292	4.410	4.992	4.493	13.894	21.187	35.329
INDIRECT COSTS	SPARES						0.146	
	START UP						0.167	
	SPARES+STARTUP						0.313	
	CONTINGENCY						3.225	
	ENGINEERING SERVICES						1.290	
	A-E FEE						1.075	
GRAND TOTAL							27.089	

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ECS STM141 PROCESS MEGAWATTS 18.13 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 307.
STM-TURB-1465/1000F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 434. KW FUEL= 127164.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.140 0.140	0.028 0.028	0.168 0.168	0.151 0.151	0.348 0.348	0.488 0.488	3.835 3.835
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.960 0.960	1.248 1.248	1.729 1.729	1.558 1.558	4.533 4.533	5.493 5.493	43.198 43.198
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.017 3.017	0. 0.	0. 0.	0. 0.	0. 0.	3.017 3.017	23.728 23.728
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.	0.444 0.444	0.409 0.409	0.368 0.368	1.221 1.221	1.221 1.221	9.603 9.603
TOTAL THIS CASE		4.118	1.721	2.306	2.075	6.102	10.219	16.319
INDIRECT COSTS							0.082	
							0.081	
							0.164	
							1.557	
							0.623	
							0.519	
GRAND TOTAL							13.083	

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I SE-PEG ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS ON/COGN PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
 NO COGENERATION SITE FUEL= COAL-FOD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1978\$*****					TOTAL	TOTAL	\$PER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	INSTALLD			
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.171	0.034	0.111	0.100	0.245	0.415	0.	
	3. LIMESTONE/DOLOMITE-U	0.131	0.123	0.110	0.099	0.333	0.464	0.	
	ISLAND TOTAL	0.302	0.157	0.221	0.199	0.577	0.679	0.	
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.255	2.543	2.794	2.514	7.851	10.105	0.	
	ISLAND TOTAL	2.255	2.543	2.794	2.514	7.851	10.105	0.	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.242	0.218	0.198	0.656	0.656	0.	
	ISLAND TOTAL	0.	0.242	0.218	0.198	0.656	0.656	0.	
TOTAL THIS CASE		2.557	2.942	3.233	2.909	9.084	11.641	0.	
INDIRECT COSTS									
	SPARES						0.051		
	START UP						0.087		
	SPARES+STARTUP						0.138		
	CONTINGENCY						1.767		
	ENGINEERING SERVICES						0.707		
	A-E FEE						0.589		
GRAND TOTAL							14.842		

GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

1 SE-PEG ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS CC0822 PROCESS MEGAWATTS 44.96

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 183.

GTST-08/2200/1465-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

444. KW FUEL= 130255.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.142 0.142	0.028 0.028	0.171 0.171	0.153 0.153	0.352 0.352	0.494 0.494	3.796 3.796
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	5.182 2.000 7.182	0.627 0. 0.627	0.366 0. 0.366	0.329 0. 0.329	1.323 0. 1.323	6.505 2.000 8.505	49.939 15.355 65.294
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.582 0.582	0.589 0.589	1.114 1.114	1.003 1.003	2.705 2.705	3.387 3.387	26.004 26.004
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.081 0. 0. 0. 0.081	0.125 0.012 0.056 0.108 0.453 0.755	0.110 0.020 0.056 0.108 0.418 0.711	0.099 0.018 0.050 0.097 0.376 0.640	0.334 0.051 0.161 0.313 1.247 2.106	0.334 0.132 0.161 0.313 1.247 2.187	2.564 1.010 1.238 2.401 9.577 16.790
TOTAL THIS CASE		8.087	1.999	2.362	2.126	6.487	14.574	16.320
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.162 0.124 0.286	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						2.229 0.892 0.743	
GRAND TOTAL							18.723	

GENERAL ELECTRIC COMPANY

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I SE-PEC ADV. DES. ENGRG.

COGENERATION TECHNOLOGY ALTERNATIVES STUDY

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS CC0822 PROCESS MEGAWATTS 31.30

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 183.

GTST-08/2200/1465-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

309. KW FUEL= 90633.

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1976\$*****						SPER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.129 0.129	0.026 0.026	0.154 0.154	0.139 0.139	0.319 0.319	0.448 0.448	4.942 4.942
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.824 1.569 5.392	0.488 0. 0.488	0.283 0. 0.283	0.254 0. 0.254	1.025 0. 1.025	4.849 1.569 6.418	53.499 17.310 70.808
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.546 0.546	0.475 0.475	0.922 0.922	0.830 0.830	2.228 2.228	2.772 2.772	30.589 30.589
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.189 0.189	0.391 0.391	0.597 0.597	0.537 0.537	1.524 1.524	1.713 1.713	18.902 18.902
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.072 0. 0. 0. 0.072	0.109 0.011 0.040 0.092 0.391 0.643	0.095 0.018 0.040 0.092 0.359 0.604	0.085 0.018 0.036 0.083 0.323 0.543	0.289 0.045 0.116 0.267 1.073 1.789	0.289 0.118 0.116 0.267 1.073 1.862	3.188 1.297 1.278 2.944 11.833 20.541
TOTAL THIS CASE		6.329	2.022	2.559	2.303	6.864	13.213	25.412
INDIRECT COSTS							0.127 0.109 0.236	
							2.017 0.807 0.872	

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I SE-PEG ADV. DES. ENGRG.

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.3
CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS CC1626 PROCESS MEGAWATTS 31.30 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
GTST-16/2600/1465-WC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 286. KW FUEL= 83911.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.133 0.133	0.027 0.027	0.159 0.159	0.143 0.143	0.329 0.329	0.462 0.462	5.508 5.508
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	4.760 1.132 5.892	0.629 0. 0.629	0.362 0. 0.362	0.326 0. 0.326	1.317 0. 1.317	6.077 1.132 7.209	72.425 13.491 85.916
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.421 0.421	0.367 0.367	0.725 0.725	0.653 0.653	1.745 1.745	2.166 2.166	25.814 25.814
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.258 0.258	0.535 0.535	0.817 0.817	0.735 0.735	2.087 2.087	2.345 2.345	27.948 27.948
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.077 0. 0. 0. 0.077	0.114 0.012 0.040 0.101 0.410 0.677	0.099 0.019 0.040 0.101 0.376 0.636	0.089 0.017 0.036 0.091 0.339 0.573	0.303 0.048 0.118 0.294 1.125 1.888	0.303 0.126 0.116 0.294 1.125 1.963	3.605 1.500 1.381 3.503 13.410 23.399
TOTAL THIS CASE		6.782	2.234	2.700	2.430	7.364	14.146	28.962
INDIRECT COSTS							0.136 0.117 0.253	
							2.160 0.864 0.720	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.3
CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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1 SE-PEO ADV. DES. ENGRG.

PROCESS 26217

ECS FCMDS PROCESS MEGAWATTS 31.30 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
FUEL-CL-MOLTCARB-DS SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 259. KW FUEL= 75960.

*****COSTS - MILLIONS-1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.134 0.134	0.027 0.027	0.161 0.161	0.145 0.145	0.333 0.333	0.467 0.467	6.154 6.154
2. FUEL-UTILIZATION-CLE	26. REFORMER-SHIFTER-AND ISLAND TOTAL	3.356 3.356	0.336 0.336	0.503 0.503	0.453 0.453	1.292 1.292	4.648 4.648	61.195 61.195
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA ISLAND TOTAL	5.943 5.943	0.594 0.594	0.891 0.891	0.802 0.802	2.288 2.288	8.231 8.231	108.359 108.359
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.306 3.663	0.634 0.970	0.968 1.472	0.871 1.324	2.474 3.766	2.780 7.428	36.598 97.792
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.326 0. 0. 0. 0.326	0.462 0.049 0.160 0.217 0.417 1.305	0.404 0.081 0.160 0.217 0.383 1.246	0.364 0.073 0.144 0.198 0.345 1.121	1.230 0.204 0.463 0.631 1.145 3.673	1.230 0.529 0.463 0.631 1.145 3.999	16.198 6.968 6.101 8.301 15.072 52.641
TOTAL THIS CASE		10.066	2.896	3.770	3.393	10.060	20.125	44.671
INDIRECT COSTS							0.201 0.167 0.369	
							3.074 1.230 1.025	

GRAND TOTAL

25.822

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1 SE-PEO ADV. DES. ENGRG.

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.3
CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 26217

ECS GTAC12 PROCESS MEGAWATTS 31.30 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
GT-HRSQ-12/2200R-AC SITE FUEL* RESIDUAL COGEN FUEL BTU*10**6* 350. KW FUEL* 102608.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.129 0.129	0.026 0.026	0.154 0.154	0.139 0.139	0.319 0.319	0.448 0.448	4.361 4.361
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	5.043 5.043	0.625 0.625	0.364 0.364	0.327 0.327	1.318 1.318	6.359 6.359	61.973 61.973
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.557 0.557	0.482 0.482	0.917 0.917	0.826 0.826	2.225 2.225	2.782 2.782	27.115 27.115
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.102 0.102	0.212 0.212	0.323 0.323	0.291 0.291	0.825 0.825	0.928 0.928	9.040 9.040
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.089 0. 0. 0. 0.089	0.143 0.013 0.053 0.110 0.391 0.710	0.125 0.022 0.053 0.110 0.358 0.668	0.113 0.020 0.047 0.099 0.322 0.601	0.381 0.056 0.153 0.318 1.071 1.979	0.381 0.144 0.153 0.318 1.071 2.067	3.712 1.407 1.490 3.100 10.439 20.149
TOTAL THIS CASE		5.920	2.054	2.426	2.183	6.864	12.584	21.280
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.118 0.104 0.222	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.921 0.768 0.640	
GRAND TOTAL							16.136	

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

1 SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS GTAC16

PROCESS MEGAWATTS

31.30

PROCESS TEMP.

368.

PROCESS HEAT(BTU*10**6)

183.

GT-HRSG-16/2200R-AC

SITE FUEL=

RESIDUAL

COGEN FUEL

BTU*10**6=

331. KW FUEL=

96890.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.129 0.129	0.028 0.028	0.155 0.155	0.140 0.140	0.321 0.321	0.450 0.450	4.644 4.644
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	5.544 5.544	0.687 0.687	0.400 0.400	0.360 0.360	1.448 1.448	6.990 6.990	72.147 72.147
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.518 0.518	0.447 0.447	0.859 0.859	0.773 0.773	2.079 2.079	2.595 2.595	26.785 26.785
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.154 0.154	0.319 0.319	0.487 0.487	0.439 0.439	1.245 1.245	1.399 1.399	14.441 14.441
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.093 0. 0. 0. 0.093	0.144 0.014 0.053 0.118 0.394 0.721	0.126 0.023 0.053 0.116 0.361 0.679	0.114 0.021 0.047 0.105 0.325 0.611	0.384 0.058 0.153 0.337 1.080 2.012	0.384 0.150 0.153 0.337 1.080 2.104	3.962 1.553 1.578 3.480 11.146 21.719
TOTAL THIS CASE		6.436	2.200	2.580	2.322	7.103	13.539	23.970
INDIRECT COSTS							0.129 0.112 0.241	
							2.067 0.827 0.689	

GRAND TOTAL

17.363

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

1 SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS GTSOAD PROCESS MEGAWATTS 31.30
GT-HRSG-10/2000D-AC SITE FUEL= DISTILLAPROCESS TEMP. 366.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 183.
366. KW FUEL= 107176.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.130 0.130	0.026 0.026	0.156 0.156	0.141 0.141	0.323 0.323	0.453 0.453	4.231 4.231
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	4.219 4.219	0.513 0.513	0.299 0.299	0.269 0.269	1.082 1.082	5.301 5.301	49.463 49.463
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.569 0.569	0.492 0.492	0.934 0.934	0.841 0.841	2.267 2.267	2.837 2.837	26.469 26.469
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.083 0.083	0.172 0.172	0.262 0.262	0.236 0.236	0.669 0.669	0.752 0.752	7.019 7.019
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.088 0. 0. 0. 0.088	0.146 0.013 0.053 0.108 0.399 0.718	0.128 0.022 0.053 0.108 0.365 0.675	0.115 0.020 0.047 0.097 0.329 0.608	0.388 0.055 0.153 0.312 1.093 2.001	0.388 0.143 0.153 0.312 1.093 2.089	3.624 1.330 1.427 2.914 10.198 19.492
TOTAL THIS CASE		5.089	1.921	2.327	2.095	6.344	11.433	19.545
INDIRECT COSTS							0.102 0.093 0.195	
							1.744 0.698 0.581	
GRAN JTAL							14.651	

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.3
CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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I SE-PEO ADV. DES. ENGRG.

PROCESS 26217

ECS QTSOAR PROCESS MEGAWATTS 31.30 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
GT-HRSQ-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 368. KW FUEL= 107915.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-ISLAND TOTAL	0.134 0.134	0.027 0.027	0.160 0.160	0.144 0.144	0.331 0.331	0.465 0.465	4.309 4.309
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATOR ISLAND TOTAL	5.751 5.751	0.681 0.681	0.399 0.399	0.359 0.359	1.440 1.440	7.191 7.191	66.632 66.632
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-ISLAND TOTAL	0.555 0.555	0.478 0.478	0.893 0.893	0.804 0.804	2.176 2.176	2.731 2.731	25.310 25.310
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.121 0.121	0.250 0.250	0.381 0.381	0.343 0.343	0.975 0.975	1.095 1.095	10.150 10.150
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTURE	0.	0.151	0.132	0.119	0.403	0.403	3.734
	80. MASTER-CONTROL	0.090	0.014	0.023	0.020	0.056	0.146	1.356
	81. ELECTRIC-SWITCHGEAR	0.	0.053	0.053	0.047	0.153	0.153	1.417
	82. INTERCONNECTING-PIPI	0.	0.112	0.112	0.101	0.324	0.324	3.005
	83. STRUCTURES-MISCELLAN ISLAND TOTAL	0.090	0.414 0.743	0.380 0.699	0.342 0.630	1.136 2.072	1.136 2.162	10.525 20.038
TOTAL THIS CASE		6.851	2.180	2.534	2.280	6.994	13.645	21.131
INDIRECT COSTS							0.133	
	SPARES						0.114	
	START UP						0.247	
	SPARES+STARTUP							
	CONTINGENCY						2.084	
	ENGINEERING SERVICES						0.833	
	A-E FEE						0.695	

GRAND TOTAL

17.503

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

1 SE-PEC ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26217

ECS GTWC16 PROCESS MEGAWATTS 31.30

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 183.

GT-HRSQ-16/2600R-WC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

339. KW FUEL= 99351.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.132 0.132	0.026 0.026	0.159 0.159	0.143 0.143	0.328 0.328	0.460 0.460	4.634 4.634
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	5.319 5.319	0.688 0.688	0.398 0.398	0.358 0.358	1.443 1.443	6.762 6.762	68.067 68.067
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.503 0.503	0.436 0.436	0.841 0.841	0.757 0.757	2.034 2.034	2.538 2.538	25.542 25.542
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.168 0.168	0.347 0.347	0.529 0.529	0.476 0.476	1.353 1.353	1.520 1.520	15.301 15.301
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.094 0. 0. 0. 0.094	0.149 0.014 0.053 0.118 0.408 0.742	0.130 0.023 0.053 0.118 0.374 0.699	0.117 0.021 0.047 0.106 0.337 0.629	0.397 0.059 0.153 0.343 1.118 2.070	0.397 0.152 0.153 0.343 1.118 2.163	3.996 1.532 1.539 3.450 11.257 21.774
TOTAL THIS CASE		6.216	2.239	2.626	2.363	7.228	13.444	23.786
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.124 0.111 0.235	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						2.052 0.621 0.684	
GRAND TOTAL							17.235	

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PROCESS 26217

ECS STIG10 PROCESS MEGAWATTS 31.30

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 183.

STIG-10-16/2200F-AC

SITE FUEL= RESIDUAL

COGEN FUEL

BTU*10**6=

297. KW FUEL= 87150.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.146 0.146	0.029 0.029	0.175 0.175	0.158 0.158	0.362 0.362	0.508 0.508	5.834 5.834
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	5.043 5.043	0.508 0.508	0.333 0.333	0.299 0.299	1.140 1.140	6.182 6.182	70.939 70.939
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.303 0.303	0.267 0.267	0.548 0.548	0.493 0.493	1.307 1.307	1.611 1.611	18.482 18.482
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.073 5.115	0.036 0.544	0.044 0.376	0.039 0.339	0.119 1.259	0.192 6.374	2.200 73.138
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.338 0.338	0.699 0.699	1.067 1.067	0.960 0.960	2.725 2.725	3.063 3.063	35.144 35.144
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.084 0. 0. 0. 0.084	0.131 0.013 0.040 0.114 0.473 0.770	0.114 0.021 0.040 0.114 0.436 0.725	0.103 0.019 0.036 0.103 0.393 0.653	0.348 0.053 0.116 0.330 1.302 2.148	0.348 0.137 0.116 0.330 1.302 2.232	3.992. 1.569 1.329 3.790 14.935 25.616
TOTAL THIS CASE		5.986	2.309	2.891	2.602	7.802	13.788	29.857
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.120 0.112 0.232	
CONTINGENCY							2.103	

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PROCESS 26217

ECS STIG15 PROCESS MEGAWATTS 31.30 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 183.
STIG-15-16/2200F-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 280. KW FUEL= 82140.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	SPER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALD		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.151	0.030	0.181	0.163	0.373	0.524	6.380
	ISLAND TOTAL	0.151	0.030	0.181	0.163	0.373	0.524	6.380
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	5.043	0.508	0.333	0.299	1.140	6.182	75.265
	ISLAND TOTAL	5.043	0.508	0.333	0.299	1.140	6.182	75.265
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	0.358	0.313	0.630	0.567	1.510	1.868	22.744
	ISLAND TOTAL	0.358	0.313	0.630	0.567	1.510	1.868	22.744
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	0.086	0.043	0.052	0.048	0.141	0.227	2.760
	ISLAND TOTAL	5.129	0.551	0.384	0.346	1.281	6.409	78.025
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.387	0.801	1.222	1.100	3.123	3.510	42.735
	ISLAND TOTAL	0.387	0.801	1.222	1.100	3.123	3.510	42.735
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.137	0.120	0.108	0.364	0.364	4.427
	80. MASTER-CONTROL	0.089	0.013	0.022	0.020	0.055	0.144	1.755
	81. ELECTRIC-SWITCHGEAR-	0.	0.040	0.040	0.038	0.118	0.116	1.410
	82. INTERCONNECTING-PIPI	0.	0.123	0.123	0.110	0.356	0.356	4.330
	83. STRUCTURES-MISCELLAN	0.	0.495	0.457	0.411	1.363	1.363	16.596
	ISLAND TOTAL	0.089	0.807	0.761	0.685	2.254	2.342	28.518
TOTAL THIS CASE		6.113	2.502	3.179	2.861	8.541	14.654	34.829
INDIRECT COSTS	SPARES						0.122	
	START UP						0.118	
	SPARES+STARTUP						0.240	
	CONTINGENCY						2.234	

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PROCESS 26218

ECS ONOCON

PROCESS MEGAWATTS

0.

PROCESS TEMP.

366.

PROCESS HEAT(BTU*10**6)

244.

N O C O G E N E R A T I

SITE FUEL=

COAL-FGD

COGEN FUEL

BTU*10**6=

0. KW FUEL=

0.

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1976\$*****						\$PER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.219	0.044	0.142	0.128	0.314	0.532	0.
	3. LIMESTONE/DOLOMITE-U	0.161	0.139	0.124	0.112	0.375	0.536	0.
	ISLAND TOTAL	0.380	0.183	0.266	0.240	0.689	1.069	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.695	3.074	3.353	3.018	9.445	12.141	0.
	ISLAND TOTAL	2.695	3.074	3.353	3.018	9.445	12.141	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.311	0.282	0.254	0.847	0.847	0.
	ISLAND TOTAL	0.	0.311	0.282	0.254	0.847	0.847	0.
TOTAL THIS CASE		3.075	3.567	3.902	3.512	10.981	14.056	0.
INDIRECT COSTS							0.062	
	SPARES						0.105	
	START UP						0.167	
	SPARES+STARTUP						2.133	
	CONTINGENCY						0.653	
	ENGINEERING SERVICES						0.711	
	A-E FEE							
GRAND TOTAL							17.921	

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PROCESS 26218

ECS STM141 PROCESS MEGAWATTS 13.72 PROCESS TEMP 366. PROCESS HEAT(BTU*10**6) 244.
STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 342. KW FUEL= 100256.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.254	0.051	0.165	0.149	0.365	0.620	6.181
	3. LIMESTONE/DOLOMITE-U	0.183	0.150	0.134	0.120	0.403	0.586	5.849
	ISLAND TOTAL	0.438	0.201	0.299	0.269	0.769	1.206	12.030
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	5.029	1.257	1.085	0.977	3.319	8.348	83.268
	ISLAND TOTAL	5.029	1.257	1.085	0.977	3.319	8.348	83.268
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	2.504	0.	0.	0.	0.	2.504	24.972
	ISLAND TOTAL	2.504	0.	0.	0.	0.	2.504	24.972
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.362	0.330	0.297	0.989	0.989	9.868
	ISLAND TOTAL	0.	0.362	0.330	0.297	0.989	0.989	9.868
TOTAL THIS CASE		7.970	1.819	1.715	1.543	5.077	13.047	15.391
INDIRECT COSTS	SPARES						0.159	
	START UP						0.115	
	SPARES+STARTUP						0.274	
	CONTINGENCY						1.998	
	ENGINEERING SERVICES						0.799	
	A-E FEE						0.666	
GRAND TOTAL							16.785	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26213

ECS STM141 PROCESS MEGAWATTS 13.72 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 244.
 STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 342. KW FUEL= 100256.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.254	0.051	0.165	0.149	0.385	0.620	6.181
	3. LIMESTONE/DOLOMITE-U	0.183	0.150	0.134	0.120	0.403	0.586	5.849
	ISLAND TOTAL	0.438	0.201	0.299	0.269	0.769	1.206	12.030
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.190	3.169	3.605	3.244	10.018	13.208	131.743
	ISLAND TOTAL	3.190	3.169	3.605	3.244	10.018	13.208	131.743
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	2.504	0.	0.	0.	0.	2.504	24.972
	ISLAND TOTAL	2.504	0.	0.	0.	0.	2.504	24.972
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.362	0.330	0.297	0.989	0.989	9.868
	ISLAND TOTAL	0.	0.362	0.330	0.297	0.989	0.989	9.868
TOTAL THIS CASE		6.131	3.731	4.234	3.811	11.776	17.907	38.009
INDIRECT COSTS	SPARES						0.123	
	START UP						0.141	
	SPARES+STARTUP						0.264	
	CONTINGENCY						2.726	
	ENGINEERING SERVICES						1.090	
	A-E FEE						0.909	
GRAND TOTAL							22.895	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28001

ECS ONOCGN

PROCESS MEGAWATTS

0.

PROCESS TEMP. 368.

PROCESS HEAT(BTU*10**6) 1100.

NO COGENERATION

SITE FUEL=

COAL-FGD

COGEN FUEL

BTU*10**6=

0. KW FUEL=

0.

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1976\$*****						TOTAL FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.804	0.161	0.522	0.470	1.153	1.957	0.
	3. LIMESTONE/DOLOMITE-U	0.474	0.263	0.231	0.208	0.702	1.176	0.
	ISLAND TOTAL	1.278	0.423	0.754	0.678	1.855	3.133	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.924	10.509	11.236	10.112	31.857	40.781	0.
	ISLAND TOTAL	8.924	10.509	11.236	10.112	31.857	40.781	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.142	1.091	0.982	3.215	3.215	0.
	ISLAND TOTAL	0.	1.142	1.091	0.982	3.215	3.215	0.
TOTAL THIS CASE		10.202	12.074	13.080	11.772	36.927	47.129	0.
INDIRECT COSTS	SPARES						0.204	
	START UP						0.354	
	SPARES+STARTUP						0.558	
	CONTINGENCY						7.153	
	ENGINEERING SERVICES						2.861	
	A-E FEE						2.384	
GRAND TOTAL							60.085	

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PROCESS 28001

ECS PFBSTM PROCESS MEGAWATTS 99.44 PROCESS TEMP. 368. PROCESS HEAT(BTU=10**6) 1100.
 PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU=10**6= 1710. KW FUEL= 501074.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.022	0.204	0.665	0.598	1.487	2.490	4.969
	3. LIMESTONE/DOLOMITE-U	0.579	0.295	0.280	0.234	0.789	1.367	2.729
	ISLAND TOTAL	1.601	0.500	0.924	0.832	2.256	3.857	7.697
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	23.838	4.529	3.337	3.004	10.870	34.709	69.269
	ISLAND TOTAL	23.838	4.529	3.337	3.004	10.870	34.709	69.269
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	8.344	2.197	1.492	1.343	5.033	13.376	26.695
	ISLAND TOTAL	8.344	2.197	1.492	1.343	5.033	13.376	26.695
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.378	0.	0.	0.	0.	6.378	12.729
	ISLAND TOTAL	6.378	0.	0.	0.	0.	6.378	12.729
TOTAL THIS CASE		40.161	7.226	5.754	5.179	18.159	58.320	10.335
INDIRECT COSTS							0.803	
	SPARES						0.531	
	START UP						1.335	
	SPARES+STARTUP							
	CONTINGENCY						8.948	
	ENGINEERING SERVICES						3.579	
	A-E FEE						2.983	
GRAND TOTAL							75.165	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28001

ECS STM088 PROCESS MEGAWATTS 32.50 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 1100.
 STM-TURB-865/825F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1161. KW FUEL= 340195.

		*****COSTS - MILLIONS 1978*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.873	0.175	0.568	0.511	1.253	2.126	6.250
	3. LIMESTONE/DOLOMITE-U	0.508	0.274	0.241	0.217	0.731	1.239	3.641
	ISLAND TOTAL	1.381	0.448	0.808	0.727	1.984	3.365	9.891
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	14.121	3.530	2.837	2.553	8.921	23.042	67.732
	ISLAND TOTAL	14.121	3.530	2.837	2.553	8.921	23.042	67.732
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.489	0.	0.	0.	0.	4.489	13.195
	ISLAND TOTAL	4.489	0.	0.	0.	0.	4.489	13.195
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.557	2.908	3.177	2.860	8.943	11.500	33.803
	ISLAND TOTAL	16.678	6.437	6.014	5.413	17.864	34.542	101.535
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.241	1.189	1.070	3.501	3.501	10.290
	ISLAND TOTAL	0.	1.241	1.189	1.070	3.501	3.501	10.290
TOTAL THIS CASE		22.548	8.126	8.012	7.211	23.348	45.896	21.195
INDIRECT COSTS	SPARES						0.451	
	START UP						0.387	
	SPARES+STARTUP						0.838	
	CONTINGENCY						7.010	
	ENGINEERING SERVICES						2.804	
	A-E FEE						2.337	
GRAND TOTAL							58.885	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28001

ECS STM141 PROCESS MEGAWATTS 58.47 PROCESS TEMP. 368. PROCESS HEAT(BTU*10**6) 1100.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1529. KW FUEL= 448008.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.928	0.186	0.603	0.543	1.332	2.260	5.045
	3. LIMESTONE/DOLOMITE-U	0.534	0.282	0.248	0.223	0.753	1.287	2.872
	ISLAND TOTAL	1.462	0.467	0.851	0.766	2.085	3.547	7.917
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	19.075	4.769	3.900	3.510	12.179	31.255	69.764
	ISLAND TOTAL	19.075	4.769	3.900	3.510	12.179	31.255	69.764
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.609	0.	0.	0.	0.	6.609	14.753
	ISLAND TOTAL	6.609	0.	0.	0.	0.	6.609	14.753
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.319	1.267	1.140	3.727	3.727	8.318
	ISLAND TOTAL	0.	1.319	1.267	1.140	3.727	3.727	8.318
TOTAL THIS CASE		27.147	6.556	6.019	5.417	17.991	45.138	12.091
INDIRECT COSTS							0.543	
	SPARES						0.397	
	START UP						0.940	
	SPARES+STARTUP							
	CONTINGENCY						6.912	
	ENGINEERING SERVICES						2.765	
	A-E FEE						2.304	
GRAND TOTAL							58.058	

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PROCESS 28002

ECS ONOCON PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU=10**6) 1054.
NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU=10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.774	0.155	0.503	0.453	1.111	1.886	0.
	3. LIMESTONE/DOLOMITE-U	0.460	0.258	0.227	0.205	0.690	1.150	0.
	ISLAND TOTAL	1.234	0.413	0.731	0.658	1.801	3.036	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.691	10.217	10.935	9.842	30.993	39.684	0.
	ISLAND TOTAL	8.691	10.217	10.935	9.842	30.993	39.684	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.101	1.050	0.945	3.096	3.096	0.
	ISLAND TOTAL	0.	1.101	1.050	0.945	3.096	3.096	0.
TOTAL THIS CASE		9.925	11.730	12.716	11.444	35.690	45.815	0.
INDIRECT COSTS	SPARES						0.198	
	START UP						0.344	
	SPARES+STARTUP						0.542	
	CONTINGENCY						6.954	
	ENGINEERING SERVICES						2.781	
	A-E FEE						2.318	
GRAND TOTAL							58.410 $\times 10^6$	
							1054	
							55400	
							554	

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PROCESS 28002

ECS PFBSTM PROCESS MEGAWATTS 95.29 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 1054.
PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU*10**6= 1638. KW FUEL= 480120.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.985	0.197	0.640	0.576	1.414	2.399	4.997
	3. LIMESTONE/DOLOMITE-U	0.561	0.290	0.255	0.230	0.775	1.336	2.783
	ISLAND TOTAL	1.547	0.487	0.896	0.806	2.189	3.735	7.780
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	23.137	4.396	3.239	2.915	10.550	33.688	70.165
	ISLAND TOTAL	23.137	4.396	3.239	2.915	10.550	33.688	70.165
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-OE	8.097	2.160	1.467	1.321	4.949	13.046	27.172
	ISLAND TOTAL	8.097	2.160	1.467	1.321	4.949	13.046	27.172
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.198	0.	0.	0.	0.	6.198	12.910
	ISLAND TOTAL	6.198	0.	0.	0.	0.	6.198	12.910
TOTAL THIS CASE		38.979	7.044	5.602	5.042	17.688	56.667	10.501
INDIRECT COSTS	SPARES						0.780	
	START UP						0.516	
	SPARES+STARTUP						1.296	
	CONTINGENCY						8.694	
	ENGINEERING SERVICES						3.478	
	A-E FEE						2.898	
GRAND TOTAL							73.033	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28002

ECS PFBSTM PROCESS MEGAWATTS 77.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 1054.
 PFB-STMTB-1465/1000F SITE FUEL= COAL-PFB COGEN FUEL BTU*10**6= 1327. KW FUEL= 388990.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
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1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.946	0.189	0.615	0.553	1.357	2.303	5.921
	3. LIMESTONE/DOLOMITE-U	0.543	0.284	0.250	0.225	0.760	1.302	3.348
	ISLAND TOTAL	1.488	0.474	0.865	0.778	2.117	3.606	9.269

2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	19.971	3.795	2.796	2.518	9.107	29.078	74.753
	ISLAND TOTAL	19.971	3.795	2.796	2.518	9.107	29.078	74.753

4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	6.987	1.990	1.350	1.215	4.555	11.542	29.671
	ISLAND TOTAL	6.987	1.990	1.350	1.215	4.555	11.542	29.671

3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	5.384	0.	0.	0.	0.	5.384	13.840
	ISLAND TOTAL	5.384	0.	0.	0.	0.	5.384	13.840

2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.383	2.698	2.956	2.681	8.313	10.898	27.498
	ISLAND TOTAL	22.354	6.491	5.752	5.177	17.420	39.774	102.250

TOTAL THIS CASE		36.213	8.955	7.967	7.171	24.092	60.305	18.434
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INDIRECT COSTS	SPARES						0.724	
	START UP						0.531	
	SPARES+STARTUP						1.256	

CONTINGENCY ENGINEERING SERVICES A-E FEE							9.234	
							3.894	
							3.078	

GRAND TOTAL

77.587

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PROCESS 28002

ECS STM141 PROCESS MEGAWATTS 56.03

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 1054.

STM-TURB-1465/1000F

SITE FUEL= COAL-AFB

COGEN FUEL BTU*10**6=

1465. KW FUEL= 429273.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.894	0.179	0.581	0.523	1.284	2.178	5.074
	3. LIMESTONE/DOLOMITE-U	0.518	0.277	0.244	0.219	0.739	1.257	2.929
	ISLAND TOTAL	1.412	0.456	0.825	0.742	2.023	3.436	8.003
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	18.602	4.650	3.826	3.443	11.919	30.520	71.098
	ISLAND TOTAL	18.602	4.650	3.826	3.443	11.919	30.520	71.098
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.423	0.	0.	0.	0.	6.423	14.963
	ISLAND TOTAL	6.423	0.	0.	0.	0.	6.423	14.963
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.272	1.219	1.097	3.588	3.588	8.359
	ISLAND TOTAL	0.	1.272	1.219	1.097	3.588	3.588	8.359
TOTAL THIS CASE		26.437	6.376	5.870	5.283	17.530	43.967	12.306
INDIRECT COSTS	SPARES						0.529	
	START UP						0.387	
	SPARES+STARTUP						0.916	
	CONTINGENCY						6.732	
	ENGINEERING SERVICES						2.693	
	A-E FEE						2.244	
GRAND TOTAL							56.552	

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PROCESS 28002

ECS STM141 PROCESS MEGAWATTS 56.03 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 1054.
STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 1465. KW FUEL= 429273.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL*HANDLING	2. COAL-UNLOAD-STORE-HA	0.894	0.179	0.581	0.523	1.284	2.178	5.074
	3. LIMESTONE/DOLOMITE-U	0.518	0.277	0.244	0.219	0.739	1.257	2.929
	ISLAND TOTAL	1.412	0.456	0.825	0.742	2.023	3.436	8.003
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	10.666	10.754	12.052	10.847	33.653	44.318	103.240
	ISLAND TOTAL	10.666	10.754	12.052	10.847	33.653	44.318	103.240
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.423	0.	0.	0.	0.	6.423	14.963
	ISLAND TOTAL	6.423	0.	0.	0.	0.	6.423	14.963
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.272	1.219	1.097	3.588	3.588	8.359
	ISLAND TOTAL	0.	1.272	1.219	1.097	3.588	3.588	8.359
TOTAL THIS CASE		18.501	12.481	14.096	12.687	39.264	57.765	29.554
INDIRECT COSTS	SPARES						0.370	
	START UP						0.451	
	SPARES+STARTUP						0.821	
	CONTINGENCY						8.788	
	ENGINEERING SERVICES						3.515	
	A-E FEE						2.929	
GRAND TOTAL							73.818	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28002

ECS TIHRSG PROCESS MEGAWATTS 87.30

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 1054.

THERMIONIC-HRSG SITE FUEL= COAL

COGEN FUEL BTU*10**6= 1632. KW FUEL= 478283.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.982 0.982	0.198 0.198	0.638 0.638	0.575 0.575	1.409 1.409	2.391 2.391	5.000 5.000
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE ISLAND TOTAL	44.419 44.419	48.158 48.158	43.658 43.658	39.292 39.292	131.108 131.108	175.527 175.527	366.993 366.993
TOTAL THIS CASE		45.401	48.354	44.296	39.867	132.517	177.918	83.354
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.908 1.381 2.289	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						27.031 10.812 9.010	
GRAND TOTAL							227.060	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28003

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD	FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.706	0.141	0.459	0.413	1.013	1.719	0.
	3. LIMESTONE/DOLOMITE-U	0.426	0.247	0.217	0.196	0.660	1.086	0.
	ISLAND TOTAL	1.132	0.388	0.676	0.609	1.673	2.805	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.132	9.520	10.217	9.195	28.932	37.064	0.
	ISLAND TOTAL	8.132	9.520	10.217	9.195	28.932	37.064	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.004	0.954	0.858	2.816	2.816	0.
	ISLAND TOTAL	0.	1.004	0.954	0.858	2.816	2.816	0.
TOTAL THIS CASE		9.264	10.911	11.847	10.662	33.420	42.685	0.
INDIRECT COSTS							0.185	
	SPARES						0.320	
	START UP						0.506	
	SPARES+STARTUP						6.479	
	CONTINGENCY						2.591	
	ENGINEERING SERVICES						2.160	
	A-E FEE							
GRAND TOTAL							54.420	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28003

ECS CC0822 PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
 OTST-08/2200/1465-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 962. KW FUEL= 281992.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.300 0.300	0.060 0.060	0.360 0.360	0.324 0.324	0.743 0.743	1.043 1.043	3.699 3.699
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	9.900 3.335 13.235	1.071 0. 1.071	0.635 0. 0.635	0.572 0. 0.572	2.277 0. 2.277	12.177 3.335 15.512	43.184 11.826 55.010
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	1.093 1.093	0.932 0.932	1.667 1.667	1.501 1.501	4.100 4.100	5.192 5.192	18.413 18.413
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.989 1.989	2.108 2.108	3.719 3.719	3.347 3.347	9.174 9.174	11.162 11.162	39.583 39.583
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.182 0. 0. 0. 0.182	0.374 0.027 0.112 0.338 1.379 2.231	0.327 0.045 0.112 0.338 1.327 2.150	0.295 0.041 0.101 0.304 1.194 1.935	0.996 0.114 0.326 0.980 3.901 6.316	0.996 0.296 0.326 0.980 3.901 6.498	3.534 1.048 1.155 3.474 13.832 23.043
TOTAL THIS CASE		16.798	6.401	8.531	7.678	22.610	39.408	27.227
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.336 0.317 0.653	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						5.009 2.404 2.003	

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PROCESS 28003

ECS FCMCCL PROCESS MEGAWATTS 178.25

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

FUEL-CL-MOLT CARB-CL SITE FUEL= COAL

COGEN FUEL BTU*10**6= 2001. KW FUEL= 586271.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	1.171 1.171	0.234 0.234	0.761 0.761	0.685 0.685	1.660 1.660	2.851 2.851	4.864 4.864
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	21.685 21.685	15.396 15.396	13.878 13.878	12.491 12.491	41.765 41.765	63.451 63.451	108.227 108.227
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA ISLAND TOTAL	27.821 27.821	8.346 8.346	4.451 4.451	4.006 4.006	16.804 16.804	44.625 44.625	76.116 76.116
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.778 0. 0. 0. 0.778	1.801 0.117 0.781 1.485 1.665 5.848	1.576 0.195 0.781 1.485 1.613 5.649	1.418 0.175 0.703 1.337 1.452 5.085	4.795 0.486 2.264 4.307 4.730 16.582	4.795 1.264 2.264 4.307 4.730 17.360	8.178 2.158 3.862 7.347 8.067 29.611
TOTAL THIS CASE		61.455	29.825	24.740	22.266	76.832	128.287	37.980
INDIRECT COSTS							1.029	
							1.060	
							2.089	
							19.556	
							7.823	
							6.519	
GRAND TOTAL							164.274	

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PROCESS 28003

ECS FCMCCL PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
FUEL-CL-MOLTCARB-CL SITE FUEL= COAL COGEN FUEL BTU*10**6= 1091. KW FUEL= 319690.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.964 0.964	0.193 0.193	0.627 0.627	0.564 0.564	1.383 1.383	2.348 2.348	7.343 7.343
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	14.755 14.755	10.476 10.476	9.443 9.443	8.499 8.499	28.417 28.417	43.172 43.172	135.044 135.044
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA ISLAND TOTAL	16.901 16.901	5.070 5.070	2.704 2.704	2.434 2.434	10.208 10.208	27.109 27.109	84.798 84.798
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER ISLAND, TOTAL	3.834 18.588	4.471 14.947	4.810 14.252	4.329 12.827	13.609 42.027	17.443 60.615	54.561 189.605
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.687 0. 0. 0. 0.687	1.488 0.103 0.449 1.247 1.370 4.657	1.302 0.172 0.449 1.247 1.318 4.487	1.171 0.155 0.404 1.122 1.186 4.039	3.961 0.430 1.302 3.616 3.875 13.183	3.961 1.117 1.302 3.616 3.875 13.870	12.389 3.493 4.074 11.310 12.120 43.386
TOTAL THIS CASE		37.140	24.867	22.071	19.864	66.801	103.942	62.134
INDIRECT COSTS							0.743 0.841 1.584	
							15.829 8.332 5.276	
GRAND TOTAL							132.962	

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PROCESS 28003

ECS FCSTCL PROCESS MEGAWATTS 259.57

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

FUEL-CL-STMTB-COAL SITE FUEL= COAL

COGEN FUEL BTU*10**6= 2352. KW FUEL= 689310.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	1.347 1.347	0.269 0.269	0.876 0.876	0.788 0.788	1.933 1.933	3.280 3.280	4.758 4.758
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	24.033 24.033	17.063 17.063	15.381 15.381	13.843 13.843	46.288 46.288	70.321 70.321	102.016 102.016
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA 30. STEAM-TURBINE-GENERA ISLAND TOTAL	31.781 5.951 37.732	9.534 0. 9.534	5.085 0. 5.085	4.576 0. 4.576	19.198 0. 19.198	50.976 5.951 56.927	73.953 8.633 82.586
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.988 0. 0. 0. 0.988	2.066 0.148 1.100 2.081 1.915 7.311	1.808 0.247 1.100 2.081 1.866 7.102	1.627 0.222 0.990 1.873 1.679 6.392	5.502 0.618 3.190 6.036 5.459 20.805	5.502 1.606 3.190 6.036 5.459 21.793	7.981 2.330 4.628 8.757 7.920 31.616
TOTAL THIS CASE		64.100	34.178	28.444	25.598	86.221	152.321	37.138
INDIRECT COSTS							1.282 1.267 2.549	
							23.231 9.292 7.744	
GRAND TOTAL							195.137	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 28003

ECS FCSTCL PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU=10**6) 947.
FUEL-CL-STMTB-COAL SITE FUEL= COAL COGEN FUEL BTU=10**6= 881. KW FUEL= 258123.

		*****COSTS - MILLIONS 1978*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.954	0.191	0.620	0.558	1.369	2.322	8.997
	ISLAND TOTAL	0.954	0.191	0.620	0.558	1.369	2.322	8.997
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER	12.881	9.145	8.244	7.419	24.808	37.689	146.011
	ISLAND TOTAL	12.881	9.145	8.244	7.419	24.808	37.689	146.011
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA	14.178	4.253	2.268	2.041	8.562	22.738	88.091
	30. STEAM-TURBINE-GENERA	3.083	0.	0.	0.	0.	3.083	11.943
	ISLAND TOTAL	17.259	4.253	2.268	2.041	8.562	25.821	100.034
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	6.079	8.988	7.585	6.827	21.398	27.477	106.450
	ISLAND TOTAL	18.960	16.131	15.829	14.246	46.206	65.166	252.461
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	1.472	1.288	1.159	3.919	3.919	15.182
	80. MASTER-CONTROL	0.741	0.111	0.185	0.167	0.463	1.205	4.668
	81. ELECTRIC-SWITCHGEAR-	0.	0.449	0.449	0.404	1.302	1.302	5.046
	82. INTERCONNECTING-PIPI	0.	1.388	1.388	1.249	4.025	4.025	15.592
	83. STRUCTURES-MISCELLAN	0.	1.356	1.303	1.173	3.832	3.832	14.846
	ISLAND TOTAL	0.741	4.776	4.614	4.152	13.542	14.283	55.334
TOTAL THIS CASE		37.914	25.351	23.330	20.997	69.679	107.592	81.347
INDIRECT COSTS							0.758	
	SPARES						0.866	
	START UP						1.824	
	SPARES+STARTUP							
	CONTINGENCY						18.382	
	ENGINEERING SERVICES						6.553	
	A-E FEE						5.461	

GRAN STAL

137.613

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PROCESS 28003

ECS GTAC12 PROCESS MEGAWATTS 97.20

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

GT-HRSQ-12/2200R-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

1087. KW FUEL= 318642.

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1978\$*****						TOTAL \$PER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.300 0.300	0.060 0.060	0.359 0.359	0.324 0.324	0.743 0.743	1.043 1.043	3.272 3.272
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	13.456 13.456	1.413 1.413	0.842 0.842	0.756 0.756	3.013 3.013	16.470 16.470	51.687 51.687
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	1.453 1.453	1.248 1.248	2.298 2.298	2.068 2.068	5.614 5.614	7.067 7.067	22.180 22.180
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	1.776 1.776	1.883 1.883	3.322 3.322	2.989 2.989	8.194 8.194	9.970 9.970	31.289 31.289
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.228 0. 0. 0. 0.228	0.494 0.034 0.148 0.415 1.378 2.469	0.432 0.057 0.148 0.415 1.326 2.377	0.389 0.051 0.133 0.373 1.193 2.140	1.314 0.143 0.430 1.203 3.897 6.986	1.314 0.371 0.430 1.203 3.897 7.214	4.124 1.163 1.349 3.775 12.228 22.640
TOTAL THIS CASE		17.214	7.072	9.199	8.279	24.550	41.763	25.981
INDIRECT COSTS								
	SPARES						0.344	
	START UP						0.335	
	SPARES+STARTUP						0.679	
	CONTINGENCY						6.366	
	ENGINEERING SERVICES						2.547	
	A-E FEE						2.122	
GRAN TOTAL							53.478	

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PROCESS 28003

ECS GTSOAR PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
 GT-HRSQ-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 1144. KW FUEL= 335123.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1978\$*****					TOTAL	TOTAL	\$PER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD			
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.308	0.062	0.370	0.333	0.764	1.072	3.199	
	ISLAND TOTAL	0.308	0.062	0.370	0.333	0.764	1.072	3.199	
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	14.414	1.447	0.868	0.781	3.096	17.511	52.252	
	ISLAND TOTAL	14.414	1.447	0.868	0.781	3.096	17.511	52.252	
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	1.415	1.210	2.185	1.967	5.362	6.777	20.224	
	ISLAND TOTAL	1.415	1.210	2.185	1.967	5.362	6.777	20.224	
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	1.817	1.926	3.398	3.058	8.381	10.198	30.432	
	ISLAND TOTAL	1.817	1.926	3.398	3.058	8.381	10.198	30.432	
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.514	0.450	0.405	1.369	1.369	4.085	
	80. MASTER-CONTROL	0.230	0.035	0.058	0.052	0.144	0.374	1.117	
	81. ELECTRIC-SWITCHGEAR-	0.	0.148	0.148	0.133	0.430	0.430	1.283	
	82. INTERCONNECTING-PIPI	0.	0.421	0.421	0.378	1.220	1.220	3.639	
	83. STRUCTURES-MISCELLAN	0.	1.437	1.384	1.248	4.067	4.067	12.135	
	ISLAND TOTAL	0.230	2.554	2.461	2.214	7.229	7.460	22.259	
TOTAL THIS CASE		18.185	7.199	9.281	8.353	24.833	43.018	24.926	
INDIRECT COSTS									
	SPARES						0.364		
	START UP						0.347		
	SPARES+STARTUP						0.710		
	CONTINGENCY						6.559		
	ENGINEERING SERVICES						2.624		
	A-E FEE						2.186		

GRAND TOTAL

55.098

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28003

ECS HEQT00 PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
 HELIUM-OT-00-REGEN SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1884. KW FUEL= 552192.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	1.128 1.128	0.228 0.228	0.733 0.733	0.680 0.680	1.619 1.619	2.747 2.747	4.974 4.974
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE ISLAND TOTAL	34.062 34.062	13.157 13.157	10.091 10.091	9.082 9.082	32.329 32.329	66.391 66.391	120.231 120.231
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	15.747 15.747	6.082 6.082	4.665 4.665	4.199 4.199	14.246 14.946	30.693 30.693	55.584 55.584
5. HEAT-SINK	50. COOLING-TOWERS-WET-I ISLAND TOTAL	1.367 1.367	0.176 0.176	0.629 0.629	0.566 0.566	1.372 1.372	2.739 2.739	4.961 4.961
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER ISLAND TOTAL	0.683 34.744	0.714 13.870	0.823 10.913	0.740 9.822	2.276 34.605	2.959 69.350	5.359 125.590
TOTAL THIS CASE		52.986	20.355	16.941	15.247	52.542	105.529	27.611
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						1.060 0.903 1.963	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						16.124 6.449 5.375	
GRAND TOTAL							135.439	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28003

ECS HEGT60 PROCESS MEGAWATTS 97.20

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

HELIUM-GT-60-REGEN

SITE FUEL= COAL-AFB

COGEN FUEL BTU*10**6=

1280. KW FUEL= 375235.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	1.149 1.149	0.230 0.230	0.747 0.747	0.672 0.672	1.649 1.649	2.797 2.797	7.455 7.455
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE ISLAND TOTAL	31.347 31.347	12.930 12.930	9.914 9.914	8.922 8.922	31.766 31.766	63.113 63.113	168.196 168.196
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	15.251 15.251	6.290 6.290	4.823 4.823	4.341 4.341	15.454 15.454	30.705 30.705	81.829 81.829
5. HEAT-SINK	50. COOLING-TOWERS-WET-I ISLAND TOTAL	1.367 1.367	0.176 0.176	0.629 0.629	0.566 0.566	1.372 1.372	2.739 2.739	7.300 7.300
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER ISLAND TOTAL	4.586 35.933	5.410 18.339	5.778 15.691	5.200 14.122	16.387 48.153	20.973 84.086	55.694 224.090
TOTAL THIS CASE		53.700	25.036	21.890	19.701	66.628	120.328	52.504
INDIRECT COSTS							1.074 1.006 2.080	
							18.361 7.344 6.120	
GRAND TOTAL							154.234	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28003

ECS HEOT85 PROCESS MEGAWATTS 97.20

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

HELIUM-GT-85-REGEN

SITE FUEL= COAL-AFB

COGEN FUEL BTU*10**6=

1033. KW FUEL= 302759.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW	
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.173	0.235	0.762	0.686	1.683	2.855	9.430	
	ISLAND TOTAL	1.173	0.235	0.762	0.686	1.683	2.855	9.430	
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	26.924	10.938	8.515	7.663	27.117	54.041	178.495	
	ISLAND TOTAL	26.924	10.938	8.515	7.663	27.117	54.041	178.495	
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	20.416	8.294	6.457	5.811	20.561	40.977	135.345	
	ISLAND TOTAL	20.416	8.294	6.457	5.811	20.561	40.977	135.345	
5. HEAT-SINK	50. COOLING-TOWERS-WET-1	1.367	0.176	0.629	0.566	1.372	2.739	9.047	
	ISLAND TOTAL	1.367	0.176	0.629	0.566	1.372	2.739	9.047	
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	7.485	8.691	9.359	8.423	26.474	33.938	112.097	
	ISLAND TOTAL	34.389	19.630	17.874	16.087	53.590	87.979	290.592	
TOTAL THIS CASE		57.344	28.335	25.722	23.150	77.206	134.551	76.463	
INDIRECT COSTS									
	SPARES						1.147		
	START UP						1.114		
	SPARES+STARTUP						2.261		
	CONTINGENCY						20.522		
	ENGINEERING SERVICES						6.209		
	A-E FEE						6.841		
GRAND TOTAL							172.383		

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PROCESS 28003

ECS 1GGTST PROCESS MEGAWATTS 97.20

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

INT-GAS-GTST-12/2100

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

1193. KW FUEL= 349657.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	1.018 1.018	0.204 0.204	0.662 0.662	0.595 0.595	1.460 1.460	2.478 2.478	7.087 7.087
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	14.535 14.535	10.175 10.175	9.448 9.448	8.503 8.503	28.126 28.126	42.661 42.661	122.007 122.007
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	10.777 3.965 14.742	0.874 0. 0.874	0.661 0. 0.661	0.595 0. 0.595	2.129 0. 2.129	12.906 3.965 16.871	36.910 11.339 48.250
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	1.622 1.622	1.388 1.388	2.525 2.525	2.273 2.273	6.186 6.186	7.809 7.809	22.332 22.332
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER ISLAND TOTAL	3.838 18.374	4.477 14.652	4.816 14.264	4.334 12.837	13.627 41.752	17.465 60.126	49.949 171.957
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.275 0. 0. 0. 0.275	0.628 0.041 0.404 0.499 1.447 3.019	0.549 0.069 0.404 0.499 1.394 2.915	0.494 0.062 0.364 0.449 1.255 2.624	1.671 0.172 1.172 1.447 4.096 8.558	1.671 0.447 1.172 1.447 4.096 8.833	4.778 1.278 3.352 4.139 11.714 25.262
TOTAL THIS CASE		36.030	20.136	21.026	18.924	60.086	98.116	54.121
INDIRECT COSTS								
	SPARES						0.721	
	START UP						0.772	
	SPARES+STARTUP						1.493	

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PROCESS 28003

ECS PFBSTM PROCESS MEGAWATTS 85.61

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 947.

PFB-STMTB-1465/1000F

SITE FUEL= COAL-PFB

COGEN FUEL BTU*10**6=

1472. KW FUEL= 431379.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.898	0.180	0.584	0.525	1.289	2.187	5.071
	3. LIMESTONE/DOLOMITE-U	0.520	0.277	0.244	0.220	0.741	1.261	2.923
	ISLAND TOTAL	1.418	0.457	0.828	0.745	2.030	3.448	7.993
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	21.469	4.079	3.006	2.705	9.790	31.259	72.462
	ISLAND TOTAL	21.469	4.079	3.006	2.705	9.790	31.259	72.462
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	7.512	2.072	1.407	1.266	4.744	12.256	28.412
	ISLAND TOTAL	7.512	2.072	1.407	1.266	4.744	12.256	28.412
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	5.770	0.	0.	0.	0.	5.770	13.375
	ISLAND TOTAL	5.770	0.	0.	0.	0.	5.770	13.375
TOTAL THIS CASE		36.168	6.608	5.240	4.716	16.564	52.733	10.933
INDIRECT COSTS							0.723	
	SPARES						0.480	
	START UP						1.204	
	SPARES+STARTUP							
	CONTINGENCY						8.090	
	ENGINEERING SERVICES						3.236	
	A-E FEE						2.697	
GRAND TOTAL							67.960	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

ECS THRSQ	PROCESS MEGAWATTS	60.47	PROCESS TEMP.	366.	PROCESS HEAT(BTU*10**6)	947.
THERMIONIC-HRSQ	SITE FUEL= COAL		COGEN FUEL	BTU*10**6=	1466.	KW FUEL= 429729.

ISLAND		*****COSTS - MILLIONS 1978*****						
DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.895	0.179	0.582	0.524	1.285	2.180	5.073
	ISLAND TOTAL	0.895	0.179	0.582	0.524	1.285	2.180	5.073
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE	39.909	44.670	40.500	36.450	121.619	161.529	375.886
	ISLAND TOTAL	39.909	44.670	40.500	36.450	121.619	161.529	375.886
TOTAL THIS CASE		40.805	44.849	41.082	36.974	122.904	163.709	86.039
INDIRECT COSTS	SPARES						0.816	
	START UP						1.267	
	SPARES+STARTUP						2.083	
	CONTINGENCY						24.869	
	ENGINEERING SERVICES						9.948	
	A-E FEE						8.290	
GRAND TOTAL							208.898	

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PROCESS 28003

ECS T1STMT PROCESS MEGAWATTS 97.20 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 947.
T1-STMTB-1465/1000F SITE FUEL= COAL COGEN FUEL BTU*10**6= 1336. KW FUEL= 391469.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.921	0.184	0.599	0.539	1.322	2.243	5.729
	ISLAND TOTAL	0.921	0.184	0.599	0.539	1.322	2.243	5.729
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE	36.356	41.838	37.935	34.142	113.915	150.272	383.866
	30. STEAM-TURBINE-GENERA	5.305	0.	0.	0.	0.	5.305	13.553
	ISLAND TOTAL	41.662	41.838	37.935	34.142	113.915	155.577	397.419
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.014	2.254	2.488	2.239	6.982	8.996	22.979
	ISLAND TOTAL	2.014	2.254	2.488	2.239	6.982	8.996	22.979
TOTAL THIS CASE		44.596	44.277	41.022	36.920	122.219	166.815	94.312
INDIRECT COSTS	SPARES						0.892	
	START UP						1.299	
	SPARES+STARTUP						2.191	
	CONTINGENCY						25.351	
	ENGINEERING SERVICES						10.140	
	A-E FEE						8.450	
GRAND TOTAL							212.948	

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I SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.235	0.047	0.153	0.137	0.337	0.572	0.
	3. LIMESTONE/DOLOMITE-U	0.171	0.144	0.128	0.116	0.388	0.559	0.
	ISLAND TOTAL	0.406	0.191	0.281	0.253	0.725	1.131	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.837	3.246	3.534	3.181	9.960	12.797	0.
	ISLAND TOTAL	2.837	3.246	3.534	3.181	9.960	12.797	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.334	0.304	0.274	0.911	0.911	0.
	ISLAND TOTAL	0.	0.334	0.304	0.274	0.911	0.911	0.
TOTAL THIS CASE		3.243	3.770	4.119	3.707	11.597	14.839	0.
INDIRECT COSTS	SPARES						0.065	
	START UP						0.111	
	SPARES+STARTUP						0.176	
	CONTINGENCY						2.252	
	ENGINEERING SERVICES						0.901	
	A-E FEE						0.751	
GRAND TOTAL							18.920	

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PROCESS 28121

ECS CC1622 PROCESS MEGAWATTS 89.63 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
3TST-16/2200/865--AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 801. KW FUEL= 234832.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.200 0.200	0.040 0.040	0.240 0.240	0.216 0.216	0.496 0.496	0.696 0.696	2.964 2.964
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATOR 30. STEAM-TURBINE-GENERATOR ISLAND TOTAL	11.648 2.623 14.271	1.273 0. 1.273	0.754 0. 0.754	0.679 0. 0.679	2.706 0. 2.706	14.354 2.623 16.977	61.125 11.169 72.294
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.852 0.852	0.728 0.728	1.315 1.315	1.184 1.184	3.227 3.227	4.079 4.079	17.368 17.368
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTURE 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.126 0. 0. 0. 0.126	0.207 0.019 0.104 0.200 0.755 1.285	0.181 0.031 0.104 0.200 0.709 1.226	0.163 0.028 0.094 0.180 0.638 1.104	0.551 0.078 0.302 0.581 2.103 3.615	0.551 0.204 0.302 0.581 2.103 3.741	2.346 0.869 1.288 2.473 8.954 15.938
TOTAL THIS CASE		15.448	3.326	3.536	3.182	10.044	25.493	13.550
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.309 0.223 0.532	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						3.904 1.561 1.301	
GRAND TOTAL							32.791	

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PROCESS 28121

ECS CC1626 PROCESS MEGAWATTS 99.54
GTST-16/2600/1465-WC SITE FUEL= RESIDUAL

PROCESS TEMP. 338.

PROCESS HEAT(BTU*10**6) 265.

COGEN FUEL BTU*10**6= 879. KW FUEL= 257673.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.211 0.211	0.042 0.042	0.253 0.253	0.228 0.228	0.524 0.524	0.735 0.735	2.851 2.851
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	11.317 2.809 14.126	1.269 0. 1.269	0.749 0. 0.749	0.674 0. 0.674	2.691 0. 2.691	14.008 2.809 16.818	54.364 10.303 65.267
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.863 0.863	0.737 0.737	1.330 1.330	1.197 1.197	3.264 3.264	4.127 4.127	16.017 16.017
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.134 0. 0. 0. 0.134	0.224 0.020 0.115 0.220 0.818 1.397	0.196 0.034 0.115 0.220 0.771 1.335	0.178 0.030 0.103 0.198 0.694 1.202	0.596 0.084 0.333 0.638 2.283 3.934	0.596 0.218 0.333 0.638 2.283 4.068	2.314 0.847 1.281 2.477 8.860 15.788
TOTAL THIS CASE		15.334	3.445	3.668	3.301	10.413	25.747	12.810
INDIRECT COSTS								
	SPARES						0.307	
	START UP						0.224	
	SPARES+STARTUP						0.531	
	CONTINGENCY						3.942	
	ENGINEERING SERVICES						1.577	
	A-E FEE						1.314	
GRAND TOTAL							33.111	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS FCMCDS PROCESS MEGAWATTS 120.00 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 FUEL-CL-MOLT CARB-DS SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 994. KW FUEL= 291219.

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	*****COSTS - MILLIONS 1978\$*****						TOTAL \$PER-KW FUEL
		MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.232 0.232	0.046 0.046	0.278 0.278	0.250 0.250	0.575 0.575	0.807 0.807	2.770 2.770
2. FUEL-UTILIZATION-CLE	28. REFORMER-SHIFTER-AND ISLAND TOTAL	12.928 12.928	1.293 1.293	1.939 1.939	1.745 1.745	4.977 4.977	17.906 17.906	61.485 61.485
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA ISLAND TOTAL	22.492 22.492	2.249 2.249	3.374 3.374	3.036 3.036	8.659 8.659	31.151 31.151	106.968 106.968
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.138 13.066	0.286 1.579	0.437 2.376	0.393 2.138	1.115 6.093	1.254 19.159	4.304 65.790
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.617 0. 0. 0. 0.617	1.027 0.093 0.544 0.536 0.940 3.140	0.899 0.154 0.544 0.536 0.891 3.024	0.809 0.139 0.490 0.482 0.802 2.722	2.735 0.386 1.578 1.553 2.633 8.885	2.735 1.003 1.578 1.553 2.633 9.502	9.391 3.443 5.420 5.333 9.043 32.630
TOTAL THIS CASE		36.407	7.014	9.052	8.147	24.212	60.619	27.974
INDIRECT COSTS							0.728 0.525 1.253	
							9.291 3.712 3.094	
GRA. TOTAL							77.959	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS FCSTCL PROCESS MEGAWATTS 79.39

PROCESS TEMP. 338.

PROCESS HEAT(BTU=10**6) 255.

FUEL-CL-STMTB-COAL

SITE FUEL= COAL

COGEN FUEL BTU=10**6=

688. KW FUEL= 201564.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.465 0.465	0.093 0.093	0.302 0.302	0.272 0.272	0.668 0.668	1.133 1.133	5.622 5.622
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	11.009 11.009	7.816 7.816	7.046 7.046	6.341 6.341	21.203 21.203	32.211 32.211	159.807 159.807
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA 30. STEAM-TURBINE-GENERA ISLAND TOTAL	11.568 3.015 14.584	3.470 0. 3.470	1.851 0. 1.851	1.666 0. 1.666	6.987 0. 6.987	18.556 3.015 21.571	92.058 14.960 107.018
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.465 0. 0. 0. 0.465	0.727 0.070 0.373 0.718 0.661 2.550	0.636 0.116 0.373 0.718 0.618 2.463	0.573 0.105 0.336 0.647 0.557 2.217	1.936 0.291 1.083 2.084 1.837 7.230	1.936 0.756 1.083 2.084 1.837 7.695	9.604 3.748 5.373 10.337 9.111 38.174
TOTAL THIS CASE		26.523	13.930	11.662	10.496	36.087	62.610	52.071
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.530 0.521 1.052	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						9.549 3.820 3.183	
GRAND TOTAL							80.214	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS GTAC16 PROCESS MEGAWATTS 57.54 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 GT-HRSG-16/2200R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 608. KW FUEL= 178128.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.170 0.170	0.034 0.034	0.204 0.204	0.184 0.184	0.423 0.423	0.593 0.593	3.329 3.329
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	9.377 9.377	1.063 1.063	0.626 0.626	0.564 0.564	2.254 2.254	11.631 11.631	65.293 65.293
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.747 0.747	0.641 0.641	1.178 1.178	1.060 1.060	2.879 2.879	3.826 3.626	20.357 20.357
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.125 0. 0. 0. 0.125	0.216 0.019 0.092 0.178 0.594 1.099	0.189 0.031 0.092 0.178 0.553 1.043	0.170 0.028 0.083 0.160 0.498 0.939	0.575 0.078 0.266 0.515 1.646 3.081	0.575 0.203 0.266 0.515 1.646 3.206	3.229 1.140 1.496 2.891 9.241 17.997
TOTAL THIS CASE		10.420	2.837	3.052	2.747	8.636	19.055	15.421
INDIRECT COSTS							0.208	
							0.163	
							0.371	
							2.914	
							1.166	
							0.971	
GRAND TOTAL							24.478	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS GTR212 PROCESS MEGAWATTS 65.22 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 GT-60RE-12/2200D-AC SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 674. KW FUEL= 197595.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.181 0.181	0.036 0.036	0.217 0.217	0.195 0.195	0.449 0.449	0.630 0.630	3.187 3.187
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	10.830 10.830	1.199 1.199	0.709 0.709	0.638 0.638	2.546 2.546	13.376 13.376	67.696 67.696
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.749 0.749	0.639 0.639	1.152 1.152	1.037 1.037	2.829 2.829	3.578 3.578	18.106 18.106
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.135 0. 0. 0. 0.135	0.236 0.020 0.103 0.199 0.650 1.208	0.206 0.034 0.103 0.199 0.608 1.149	0.186 0.030 0.093 0.179 0.547 1.035	0.628 0.085 0.299 0.576 1.804 3.392	0.628 0.220 0.299 0.576 1.804 3.528	3.179 1.113 1.512 2.916 9.132 17.852
TOTAL THIS CASE		11.895	3.083	3.228	2.905	9.216	21.111	14.702
INDIRECT COSTS								
	SPARES						0.238	
	START UP						0.182	
	SPARES+STARTUP						0.420	
	CONTINGENCY						3.230	
	ENGINEERING SERVICES						1.292	
	A-E FEE						1.077	
GRAND TOTAL							27.129	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 28121

ECS GTRA12 PROCESS MEGAWATTS 78.14 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
GT-85RE-12/2200D-AC SITE FUEL= DISTILLA COGEN FUEL BTU*10**6= 745. KW FUEL= 218241.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.192 0.192	0.038 0.038	0.230 0.230	0.207 0.207	0.475 0.475	0.667 0.667	3.057 3.057
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	13.502 13.502	1.454 1.454	0.863 0.863	0.777 0.777	3.095 3.095	16.597 16.597	76.048 76.048
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.749 0.749	0.639 0.639	1.152 1.152	1.037 1.037	2.829 2.829	3.578 3.578	16.393 16.393
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.152 0. 0. 0. 0.152	0.257 0.023 0.121 0.234 0.708 1.343	0.225 0.038 0.121 0.234 0.664 1.282	0.202 0.034 0.109 0.210 0.598 1.154	0.683 0.095 0.352 0.678 1.971 3.779	0.683 0.247 0.352 0.678 1.971 3.931	3.132 1.131 1.614 3.106 9.029 18.012
TOTAL THIS CASE		14.594	3.475	3.528	3.175	10.178	24.772	14.548
INDIRECT COSTS							0.292	
							0.216	
							0.508	
							3.792	
							1.517	
							1.264	
GRAND TOTAL							31.853	

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PROCESS 28121

ECS QTSOAD PROCESS MEGAWATTS 48.92

PROCESS TEMP. 338.

PROCESS HEAT(BTU*10**6) 265.

QT-HRSQ-10/2000D-AC

SITE FUEL= DISTILLA

COGEN FUEL

BTU*10**6=

572. KW FUEL= 167514.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.164 0.164	0.033 0.033	0.197 0.197	0.178 0.178	0.408 0.408	0.572 0.572	3.416 3.416
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	6.149 6.148	0.701 0.701	0.413 0.413	0.371 0.371	1.485 1.485	7.633 7.633	45.565 45.565
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.747 0.747	0.641 0.641	1.178 1.178	1.060 1.060	2.879 2.879	3.628 3.626	21.647 21.647
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.113 0. 0. 0.113	0.205 0.017 0.079 0.153 1.018	0.179 0.028 0.079 0.153 0.964	0.161 0.025 0.071 0.138 0.868	0.546 0.070 0.230 0.445 2.850	0.546 0.183 0.230 0.445 2.963	3.259 1.094 1.372 2.657 17.688
TOTAL THIS CASE		7.172	2.393	2.752	2.477	7.622	14.794	14.785
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.143 0.123 0.267	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						2.259 0.904 0.753	
GRAND TOTAL							18.976	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS GTSOAR PROCESS MEGAWATTS 52.11 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 GT-HRSG-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 613. KW FUEL= 179662.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.171 0.171	0.034 0.034	0.205 0.205	0.185 0.185	0.425 0.425	0.596 0.596	3.317 3.317
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	8.695 8.695	0.956 0.956	0.566 0.566	0.509 0.509	2.032 2.032	10.726 10.726	59.703 59.703
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.749 0.749	0.639 0.639	1.152 1.152	1.037 1.037	2.829 2.829	3.578 3.578	19.913 19.913
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.117 0. 0. 0.117	0.218 0.018 0.084 0.162 0.599 1.080	0.190 0.029 0.084 0.162 0.558 1.024	0.171 0.028 0.078 0.146 0.502 0.922	0.579 0.073 0.243 0.471 1.659 3.026	0.579 0.191 0.243 0.471 1.659 3.143	3.225 1.062 1.355 2.622 9.232 17.495
TOTAL THIS CASE		9.732	2.711	2.948	2.653	8.311	18.043	14.766
INDIRECT COSTS								
	SPARES						0.195	
	START UP						0.154	
	SPARES+STARTUP						0.349	
	CONTINGENCY						2.759	
	ENGINEERING SERVICES						1.103	
	A-E FEE						0.920	
GRAND TOTAL							23.173	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

I SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS HEQT85 PROCESS MEGAWATTS 120.00 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 265.
 HELIUM-GT-85-REGEN SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1276. KW FUEL= 373777.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.832	0.166	0.541	0.487	1.195	2.027	5.423
	ISLAND TOTAL	0.832	0.166	0.541	0.487	1.195	2.027	5.423
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	31.208	12.642	9.833	8.849	31.324	62.531	167.296
	ISLAND TOTAL	31.208	12.642	9.833	8.849	31.324	62.531	167.296
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	23.851	9.661	7.515	6.763	23.939	47.790	127.857
	ISLAND TOTAL	23.851	9.661	7.515	6.763	23.939	47.790	127.857
5. HEAT-SINK	50. COOLING-TOWERS-WET-I	1.584	0.195	0.710	0.639	1.544	3.127	8.367
	ISLAND TOTAL	1.584	0.195	0.710	0.639	1.544	3.127	8.367
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	1.147	1.239	1.399	1.259	3.897	5.044	13.495
	ISLAND TOTAL	32.355	13.881	11.232	10.108	35.221	67.575	180.791
TOTAL THIS CASE		58.621	23.904	19.997	17.998	61.899	120.520	48.151
INDIRECT COSTS								
	SPARES						1.172	
	START UP						1.025	
	SPARES+STARTUP						2.198	
	CONTINGENCY						18.408	
	ENGINEERING SERVICES						7.363	
	A-E FEE						6.136	
GRAND TOTAL							154.624	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS 100TST PROCESS MEGAWATTS 55.79

PROCESS TEMP. 338.

PROCESS HEAT(BTU*10**6) 265.

INT-GAS-GTST-12/2100

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

641. KW FUEL= 187938.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.438 0.438	0.088 0.088	0.285 0.285	0.258 0.256	0.629 0.629	1.067 1.067	5.676 5.676
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	9.797 9.797	6.858 6.858	6.368 6.368	5.731 5.731	18.958 18.958	28.755 28.755	153.005 153.005
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	6.353 3.025 9.378	0.617 0. 0.617	0.520 0. 0.520	0.468 0. 0.468	1.604 0. 1.604	7.937 3.025 10.982	42.339 16.095 58.434
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.850 0.850	0.726 0.726	1.313 1.313	1.182 1.182	3.221 3.221	4.070 4.070	21.657 21.657
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.149 0. 0. 0. 0.149	0.274 0.022 0.244 0.209 0.623 1.372	0.240 0.037 0.244 0.209 0.581 1.311	0.218 0.033 0.219 0.188 0.523 1.180	0.730 0.093 0.706 0.607 1.726 3.862	0.730 0.241 0.706 0.607 1.726 4.011	3.882 1.285 3.759 3.230 9.184 21.341
TOTAL THIS CASE		20.611	9.660	9.796	8.817	28.274	48.885	46.914
INDIRECT COSTS							0.412 0.401 0.813	
	SPARES START UP SPARES+STARTUP							
	CONTINGENCY ENGINEERING SERVICES A-E FEE						7.455 2.982 2.485	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS ST1010 PROCESS MEGAWATTS 120.00

PROCESS TEMP. 338.

PROCESS HEAT(BTU*10**6) 265.

ST10-10-16/2200F-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

1140. KW FUEL= 334120.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.262 0.262	0.052 0.052	0.314 0.314	0.283 0.283	0.649 0.649	0.911 0.911	2.727 2.727
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	17.143 17.143	1.517 1.517	0.854 0.854	0.769 0.769	3.141 3.141	20.284 20.284	60.710 60.710
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.682 0.682	0.587 0.587	1.089 1.089	0.980 0.980	2.657 2.657	3.339 3.339	9.994 9.994
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.165 17.309	0.083 1.600	0.099 0.954	0.089 0.858	0.271 3.412	0.437 20.721	1.307 62.017
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.293 0.293	0.606 0.606	0.926 0.926	0.833 0.833	2.365 2.365	2.658 2.658	7.954 7.954
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.161 0. 0. 0. 0.161	0.307 0.024 0.136 0.286 1.127 1.880	0.269 0.040 0.136 0.286 1.076 1.806	0.242 0.036 0.122 0.257 0.968 1.626	0.817 0.101 0.395 0.828 3.171 5.312	0.817 0.262 0.395 0.828 3.171 5.474	2.445 0.785 1.181 2.479 9.491 16.382
TOTAL THIS CASE		18.707	4.725	5.089	4.580	14.395	33.102	13.709
INDIRECT COSTS							0.374 0.285 0.659	
CONTINGENCY							5.064	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28121

ECS ST1015 PROCESS MEGAWATTS 120.00

PROCESS TEMP. 339.

PROCESS HEAT(BTU*10**6) 265.

ST10-15-16/2200F-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

1075. KW FUEL= 314914.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.273 0.273	0.055 0.055	0.328 0.328	0.295 0.295	0.677 0.677	0.950 0.950	3.017 3.017
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	17.143 17.143	1.517 1.517	0.854 0.854	0.769 0.769	3.141 3.141	20.284 20.284	64.412 64.412
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.805 0.805	0.689 0.689	1.253 1.253	1.128 1.128	3.070 3.070	3.875 3.875	12.306 12.306
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.196 17.339	0.093 1.615	0.117 0.972	0.106 0.875	0.321 3.462	0.517 20.801	1.640 66.052
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.475 0.475	0.984 0.984	1.502 1.502	1.352 1.352	3.838 3.838	4.314 4.314	13.698 13.698
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.173 0. 0. 0. 0.173	0.326 0.026 0.136 0.316 1.200 2.004	0.286 0.043 0.136 0.316 1.148 1.929	0.257 0.039 0.122 0.284 1.033 1.736	0.869 0.108 0.395 0.916 3.381 5.669	0.869 0.282 0.395 0.916 3.381 5.843	2.759 0.895 1.253 2.908 10.738 18.553
TOTAL THIS CASE		19.066	5.347	5.984	5.386	18.717	35.783	17.102
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.381 0.304 0.685	
	CONTINGENCY						5.470	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28212

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 422. PROCESS HEAT(BTU*10**6) 207.
 NO COGENERATION SITE FUEL= COAL-FOD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.190	0.038	0.123	0.111	0.272	0.462	0.
	3. LIMESTONE/DOLOMITE-U	0.144	0.130	0.116	0.104	0.350	0.494	0.
	ISLAND TOTAL	0.333	0.168	0.239	0.215	0.622	0.956	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.434	2.758	3.021	2.719	8.498	10.932	0.
	ISLAND TOTAL	2.434	2.758	3.021	2.719	8.498	10.932	0.
8. BALANCE-OF-PLANT	83. STRUCTUREC-MISCELLAN	0.	0.270	0.243	0.219	0.732	0.732	0.
	ISLAND TOTAL	0.	0.270	0.243	0.219	0.732	0.732	0.
TOTAL THIS CASE		2.767	3.195	3.504	3.153	9.852	12.619	0.
INDIRECT COSTS	SPARES						0.055	
	START UP						0.095	
	SPARES+STARTUP						0.150	
	CONTINGENCY						1.915	
	ENGINEERING SERVICES						0.766	
	A-E FEE						0.638	
GRAND TOTAL							16.089	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28212

ECS STM088 PROCESS MEGAWATTS 7.31 PROCESS TEMP. 422. PROCESS HEAT(BTU*10**6) 207.
 STM-TURB-865/825F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 273. KW FUEL= 79961.

*****COSTS - MILLION 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDIRECT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.209	0.042	0.136	0.122	0.300	0.510	6.373
	3. LIMESTONE/DOLOMITE-U	0.156	0.136	0.122	0.109	0.367	0.523	6.538
	ISLAND TOTAL	0.365	0.178	0.258	0.232	0.667	1.032	12.911
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	4.524	1.131	1.007	0.908	3.043	7.567	94.632
	ISLAND TOTAL	4.524	1.131	1.007	0.906	3.043	7.567	94.632
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	1.499	0.	0.	0.	0.	1.499	18.747
	ISLAND TOTAL	1.499	0.	0.	0.	0.	1.499	18.747
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.297	0.270	0.243	0.810	0.810	10.126
	ISLAND TOTAL	0.	0.297	0.270	0.243	0.810	0.810	10.126
TOTAL THIS CASE		6.388	1.606	1.534	1.380	4.520	10.908	17.264
INDIRECT COSTS							0.128	
	SPARES						0.095	
	START UP						0.223	
	SPARES+STARTUP							
	CONTINGENCY						1.870	
	ENGINEERING SERVICES						0.868	
	A-E FEE						0.557	
GRAND TOTAL							14.025	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28221

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 338. PROCESS HEAT(BTU=10**6) 35.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU=10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.041	0.008	0.027	0.024	0.059	0.099	0.
	3. LIMESTONE/DOLOMITE-U	0.040	0.061	0.056	0.050	0.167	0.207	0.
	ISLAND TOTAL	0.081	0.069	0.082	0.074	0.225	0.307	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	1.578	0.394	0.454	0.408	1.256	2.834	0.
	ISLAND TOTAL	1.578	0.394	0.454	0.408	1.256	2.834	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.058	0.049	0.044	0.152	0.152	0.
	ISLAND TOTAL	0.	0.058	0.049	0.044	0.152	0.152	0.
TOTAL THIS CASE		1.659	0.522	0.585	0.527	1.633	3.293	0.
INDIRECT COSTS							0.033	
	SPARES						0.028	
	START UP						0.061	
	SPARES+STARTUP						0.503	
	CONTINGENCY						0.201	
	ENGINEERING SERVICES						0.168	
	A-E FEE							
GRAND TOTAL							4.225	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 28221

ECS DEADV3 PROCESS MEGAWATTS 7.50 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 35.
DIESEL-ADVANCED-3 SITE FUEL* RESIDUAL COGEN FUEL BTU*10**6= 69. KW FUEL* 20213.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.057	0.011	0.069	0.062	0.142	0.199	9.844
	ISLAND TOTAL	0.057	0.011	0.069	0.062	0.142	0.199	9.844
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA	3.315	0.321	0.321	0.289	0.931	4.247	210.106
	ISLAND TOTAL	3.315	0.321	0.321	0.289	0.931	4.247	210.106
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.101	0.209	0.319	0.287	0.815	0.916	45.307
	ISLAND TOTAL	0.101	0.209	0.319	0.287	0.815	0.916	45.307
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.132	0.116	0.104	0.352	0.352	17.429
	80. MASTER-CONTROL	0.123	0.018	0.031	0.028	0.077	0.200	9.873
	81. ELECTRIC-SWITCHGEAR-	0.	0.043	0.043	0.039	0.126	0.126	6.230
	82. INTERCONNECTING-PIPI	0.	0.055	0.055	0.049	0.159	0.159	7.879
	83. STRUCTURES-MISCELLAN	0.	0.117	0.102	0.092	0.311	0.311	15.379
	ISLAND TOTAL	0.123	0.366	0.347	0.312	1.025	1.148	56.790
TOTAL THIS CASE		3.596	0.907	1.056	0.950	2.913	6.509	47.005
INDIRECT COSTS	SPARES						0.072	
	START UP						0.056	
	SPARES+STARTUP						0.128	
	CONTINGENCY						0.996	
	ENGINEERING SERVICES						0.398	
	A-E FEE						0.332	
GRAND TOTAL							8.363	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 26221

ECS DEHTPM PROCESS MEGAWATTS 7.50
ADV-DIESEL-HEAT-PUMP SITE FUEL= RESIDUALPROCESS TEMP. 338.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 35.
76. KW FUEL= 22224.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.052 0.052	0.010 0.010	0.062 0.062	0.056 0.056	0.129 0.129	0.181 0.161	9.147 8.147
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA 32. DIESEL-ENGINE-GENERA ISLAND TOTAL	3.513 0.114 3.627	0.337 0.014 0.351	0.337 0.012 0.349	0.303 0.011 0.314	0.977 0.037 1.014	4.490 0.151 4.641	202.028 6.794 208.822
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.027 0.027	0.057 0.057	0.087 0.087	0.078 0.078	0.222 0.222	0.249 0.249	11.202 11.202
6. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.106 0. 0. 0. 0.106	0.115 0.016 0.043 0.045 0.101 0.321	0.101 0.026 0.043 0.045 0.088 0.304	0.091 0.024 0.039 0.040 0.079 0.273	0.307 0.066 0.126 0.129 0.269 0.897	0.307 0.172 0.126 0.129 0.269 1.003	13.806 7.748 5.666 5.819 12.111 45.149
TOTAL THIS CASE		3.812	0.738	0.802	0.722	2.262	6.074	32.483
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.076 0.054 0.130	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.931 0.372 0.310	
GRAND TOTAL							7.817	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28221

ECS DES0A3
DIESEL-SOA-3PROCESS MEGAWATTS 7.50
SITE FUEL= DISTILLAPROCESS TEMP. 338.
COGEN FUEL BTU*10**6=PROCESS HEAT(BTU*10**6) 35.
71. KW FUEL= 20773.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.059 0.059	0.012 0.012	0.070 0.070	0.063 0.063	0.146 0.146	0.204 0.204	9.832 9.832
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	2.648 2.648	0.503 0.503	0.503 0.503	0.453 0.453	1.459 1.459	4.106 4.106	197.688 197.688
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.107 0.107	0.221 0.221	0.338 0.338	0.304 0.304	0.864 0.864	0.971 0.971	46.728 46.728
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.125 0. 0. 0.125	0.137 0.019 0.043 0.056 0.121 0.377	0.120 0.031 0.043 0.056 0.106 0.357	0.108 0.028 0.039 0.050 0.096 0.322	0.366 0.078 0.126 0.163 0.323 1.056	0.366 0.203 0.126 0.163 0.323 1.181	17.620 9.749 6.062 7.827 15.573 56.831
TOTAL THIS CASE		2.938	1.113	1.269	1.142	3.524	6.462	54.971
INDIRECT COSTS							0.059	
							0.053	
							0.112	
							0.986	
							0.394	
							0.329	
GRAND TOTAL							8.283	

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I SE-PEC ADV. DES. ENGRG.

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28221

ECS GTAC16 PROCESS MEGAWATTS 7.50
GT-HRSQ-16/2200R-AC SITE FUEL= RESIDUALPROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 35.
COGEN FUEL BTU*10**6= 79. KW FUEL= 23216.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.052 0.052	0.010 0.010	0.063 0.063	0.057 0.057	0.130 0.130	0.183 0.183	7.862 7.862
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.615 1.615	0.247 0.247	0.139 0.139	0.125 0.125	0.511 0.511	2.127 2.127	91.597 91.597
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.205 0.205	0.182 0.182	0.389 0.389	0.350 0.350	0.921 0.921	1.126 1.126	48.503 48.503
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.010 0.010	0.021 0.021	0.032 0.032	0.028 0.028	0.081 0.081	0.091 0.091	3.905 3.905
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.034 0. 0. 0.034	0.038 0.005 0.014 0.029 0.103 0.189	0.034 0.009 0.014 0.029 0.089 0.175	0.030 0.008 0.013 0.026 0.080 0.157	0.102 0.021 0.042 0.083 0.273 0.521	0.102 0.056 0.042 0.083 0.273 0.555	4.413 2.403 1.790 3.582 11.738 23.926
TOTAL THIS CASE		1.917	0.649	0.797	0.717	2.164	4.081	30.902
INDIRECT COSTS							0.038 0.034 0.072	
							0.623 0.249 0.208	
GRAND TOTAL							5.233	

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PROCESS 28221

ECS OTSGAR PROCESS MEGAWATTS 6.88 PROCESS TEMP. 338. PROCESS HEAT(BTU*10**6) 35.
 GT-HRSG-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 81. KW FUEL= 23729.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.053	0.011	0.063	0.057	0.131	0.184	7.760
	ISLAND TOTAL	0.053	0.011	0.063	0.057	0.131	0.184	7.760
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	1.684	0.249	0.141	0.127	0.517	2.201	92.769
	ISLAND TOTAL	1.684	0.249	0.141	0.127	0.517	2.201	92.769
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	0.231	0.204	0.429	0.386	1.019	1.250	52.685
	ISLAND TOTAL	0.231	0.204	0.429	0.386	1.019	1.250	52.685
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.039	0.034	0.031	0.104	0.104	4.373
	80. MASTER-CONTROL	0.032	0.005	0.008	0.007	0.020	0.053	2.216
	81. ELECTRIC-SWITCHGEAR-	0.	0.013	0.013	0.012	0.038	0.038	1.619
	82. INTERCONNECTING-PIPI	0.	0.026	0.026	0.024	0.077	0.077	3.224
	83. STRUCTURES-MISCELLAN	0.	0.104	0.091	0.082	0.276	0.276	11.638
	ISLAND TOTAL	0.032	0.188	0.172	0.155	0.515	0.547	23.070
TOTAL THIS CASE		2.001	0.652	0.806	0.725	2.182	4.183	30.562
INDIRECT COSTS							0.040	
	SPARES						0.035	
	START UP						0.075	
	SPARES+STARTUP							
	CONTINGENCY						0.639	
	ENGINEERING SERVICES						0.255	
	A-E FEE						0.213	
GRAND TOTAL							5.365	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28242

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 274. PROCESS HEAT(BTU*10**6) 23.
 NO COGENERATION SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.028 0.028	0.006 0.006	0.034 0.034	0.030 0.030	0.069 0.069	0.097 0.097	0. 0.
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.110 0.110	0.227 0.227	0.347 0.347	0.312 0.312	0.887 0.887	0.996 0.996	0. 0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.	0.040 0.040	0.034 0.034	0.030 0.030	0.105 0.105	0.105 0.105	0. 0.
TOTAL THIS CASE		0.138	0.273	0.414	0.373	1.061	1.199	0.
INDIRECT COSTS							0.003	
							0.008	
							0.011	
							0.181	
							0.073	
							0.060	
GRAND TOTAL							1.524	

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PROCESS 28242

ECS CC1222 PROCESS MEGAWATTS 8.21 PROCESS TEMP. 274. PROCESS HEAT(BTU*10**6) 23.
GTST-12/2200/1465-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 71. KW FUEL= 20661.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.049 0.049	0.010 0.010	0.059 0.059	0.053 0.053	0.122 0.122	0.171 0.171	8.191 8.191
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATOR 30. STEAM-TURBINE-GENERA ISLAND TOTAL	1.269 0.653 1.922	0.199 0. 0.199	0.112 0. 0.112	0.100 0. 0.100	0.411 0. 0.411	1.680 0.653 2.333	80.519 31.293 111.812
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.181 0.181	0.162 0.162	0.355 0.355	0.320 0.320	0.836 0.836	1.017 1.017	48.761 48.761
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.027 0. 0. 0. 0.027	0.026 0.004 0.012 0.023 0.093 0.159	0.023 0.007 0.012 0.023 0.081 0.146	0.021 0.006 0.011 0.021 0.073 0.131	0.070 0.017 0.034 0.068 0.246 0.436	0.070 0.045 0.034 0.068 0.246 0.463	3.378 2.136 1.638 3.254 11.811 22.216
TOTAL THIS CASE		2.179	0.529	0.672	0.604	1.805	3.984	28.977
INDIRECT COSTS							0.044 0.034 0.077	
							0.609 0.244 0.203	
GRAND TOTAL							5.117	

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PROCESS 28242

ECS DEADV3 PROCESS MEGAWATTS 10.25

PROCESS TEMP. 274.

PROCESS HEAT(BTU*10**6) 23.

DIESEL-ADVANCED-3

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

94. KW FUEL= 27634.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.058	0.012	0.069	0.062	0.143	0.201	7.279
	ISLAND TOTAL	0.058	0.012	0.069	0.062	0.143	0.201	7.279
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA	4.012	0.378	0.376	0.338	1.090	5.103	184.648
	ISLAND TOTAL	4.012	0.378	0.376	0.338	1.090	5.103	184.648
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.134	0.118	0.106	0.358	0.358	12.952
	80. MASTER-CONTROL	0.126	0.019	0.032	0.028	0.079	0.205	7.431
	81. ELECTRIC-SWITCHGEAR-	0.	0.058	0.058	0.052	0.167	0.167	6.061
	82. INTERCONNECTING-PIPI	0.	0.057	0.057	0.051	0.166	0.166	6.000
	83. STRUCTURES-MISCELLAN	0.	0.119	0.104	0.093	0.316	0.316	11.436
	ISLAND TOTAL	0.126	0.387	0.368	0.331	1.086	1.213	43.880
TOTAL THIS CASE		4.196	0.775	0.813	0.732	2.320	6.516	26.489
INDIRECT COSTS	SPARES						0.084	
	START UP						0.058	
	SPARES+STARTUP						0.142	
	CONTINGENCY						0.999	
	ENGINEERING SERVICES						0.399	
	A-E FEE						0.333	
GRAND TOTAL							8.389	

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PROCESS 28242

ECS DEHTPM PROCESS MEGAWATTS 5.54

ADV-DIESEL-HEAT-PUMP

SITE FUEL= RESIDUAL

PROCESS TEMP. 274.

COGEN FUEL BTU*10**6=

PROCESS HEAT(BTU*10**6)

23.

53. KW FUEL= 15453.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.041 0.041	0.008 0.008	0.050 0.050	0.045 0.045	0.102 0.102	0.144 0.144	9.290 9.290
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA 32. DIESEL-ENGINE-GENERA ISLAND TOTAL	2.815 0.045 2.859	0.281 0.005 0.286	0.281 0.005 0.285	0.252 0.004 0.257	0.814 0.015 0.828	3.628 0.060 3.688	234.782 3.854 238.636
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.085 0. 0. 0. 0.085	0.082 0.013 0.033 0.033 0.072 0.232	0.072 0.021 0.033 0.033 0.062 0.221	0.065 0.019 0.030 0.030 0.055 0.199	0.218 0.053 0.095 0.095 0.189 0.652	0.218 0.139 0.095 0.095 0.189 0.737	14.137 8.977 6.179 6.170 12.225 47.687
TOTAL THIS CASE		2.986	0.527	0.556	0.500	1.582	4.568	32.356
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.060 0.041 0.100	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.700 0.280 0.233	
GRAND TOTAL							5.882	

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PROCESS 28242

ECS DES0A3 PROCESS MEGAWATTS 11.00
DIESEL-S0A-3 SITE FUEL= RESIDUALPROCESS TEMP. 274. PROCESS HEAT(BTU*10**6) 23.
COGEN FUEL BTU*10**6= 104. KW FUEL= 30466.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.062 0.062	0.012 0.012	0.074 0.074	0.067 0.067	0.153 0.153	0.214 0.214	7.040 7.040
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	3.883 3.883	0.738 0.738	0.738 0.738	0.664 0.664	2.140 2.140	6.023 6.023	197.691 197.691
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.018 0.018	0.037 0.037	0.056 0.056	0.050 0.050	0.143 0.143	0.161 0.161	5.287 5.287
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.133 0. 0. 0. 0.133	0.148 0.020 0.062 0.062 0.131 0.421	0.129 0.033 0.062 0.062 0.115 0.400	0.116 0.030 0.055 0.055 0.103 0.360	0.393 0.083 0.179 0.179 0.349 1.182	0.393 0.216 0.179 0.179 0.349 1.315	12.908 7.103 5.861 5.861 11.442 43.175
TOTAL THIS CASE		4.096	1.208	1.268	1.141	3.618	7.714	37.465
INDIRECT COSTS								
		SPARES						0.082
		START UP						0.056
		SPARES+STARTUP						0.148
		CONTINGENCY						1.179
		ENGINEERING SERVICES						0.472
		A-E FEE						0.393
GRAND TOTAL								9.906

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PROCESS 28653

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 489. PROCESS HEAT(BTU*10**6) 300.
NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.281	0.052	0.170	0.153	0.375	0.637	0.
	3. LIMESTONE/DOLOMITE-U	0.187	0.152	0.135	0.122	0.409	0.596	0.
	ISLAND TOTAL	0.449	0.204	0.305	0.275	0.784	1.232	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.064	3.523	3.823	3.441	10.787	13.851	0.
	ISLAND TOTAL	3.064	3.523	3.823	3.441	10.787	13.851	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.372	0.340	0.306	1.017	1.017	0.
	ISLAND TOTAL	0.	0.372	0.340	0.306	1.017	1.017	0.
TOTAL THIS CASE		3.512	4.098	4.466	4.022	12.588	16.100	0.
INDIRECT COSTS							0.070	
	SPARES						0.121	
	START UP						0.191	
	SPARES+STARTUP						2.444	
	CONTINGENCY						0.977	
	ENGINEERING SERVICES						0.815	
	A-E FEE							
GRAND TOTAL							20.527	

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PROCESS 28653

ECS STM141 PROCESS MEGAWATTS 13.35 PROCESS TEMP. 489. PROCESS HEAT(BTU*10**6) 300.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 407. KW FUEL= 119131.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.295	0.059	0.192	0.173	0.424	0.719	6.038
	3. LIMESTONE/DOLOMITE-U	0.207	0.161	0.143	0.129	0.433	0.641	5.377
	ISLAND TOTAL	0.503	0.220	0.335	0.302	0.857	1.360	11.414
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	5.566	1.392	1.174	1.056	3.621	9.188	77.123
	ISLAND TOTAL	5.566	1.392	1.174	1.056	3.621	9.188	77.123
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	2.459	0.	0.	0.	0.	2.459	20.637
	ISLAND TOTAL	2.459	0.	0.	0.	0.	2.459	20.637
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.420	0.386	0.347	1.153	1.153	9.675
	ISLAND TOTAL	0.	0.420	0.386	0.347	1.153	1.153	9.675
TOTAL THIS CASE		8.527	2.031	1.895	1.705	5.631	14.159	14.313
INDIRECT COSTS	SPARES						0.171	
	START UP						0.125	
	SPARES+STARTUP						0.295	
	CONTINGENCY						2.168	
	ENGINEERING SERVICES						0.867	
	A-E FEE						0.723	
GRAND TOTAL							18.212	

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PROCESS 28653

ECS STM141 PROCESS MEGAWATTS 13.35 PROCESS TEMP. 489. PROCESS HEAT(BTU*10**6) 300.
STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 407. KW FUEL= 119131.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.295	0.059	0.192	0.173	0.424	0.719	6.038
	3. LIMESTONE/DOLomite-U	0.207	0.161	0.143	0.129	0.433	0.641	5.377
	ISLAND TOTAL	0.503	0.220	0.335	0.302	0.857	1.360	11.414
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.584	3.572	4.050	3.645	11.267	14.851	124.662
	ISLAND TOTAL	3.584	3.572	4.050	3.645	11.267	14.851	124.662
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	2.459	0.	0.	0.	0.	2.459	20.637
	ISLAND TOTAL	2.459	0.	0.	0.	0.	2.459	20.637
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.420	0.386	0.347	1.153	1.153	9.675
	ISLAND TOTAL	0.	0.420	0.386	0.347	1.153	1.153	9.675
TOTAL THIS CASE		6.545	4.212	4.771	4.294	13.277	19.822	36.044
INDIRECT COSTS							0.131	
	SPARES						0.155	
	START UP						0.286	
	SPARES+STARTUP							
	CONTINGENCY						3.016	
	ENGINEERING SERVICES						1.206	
	A-E FEE						1.005	
GRAND TOTAL							25.336	

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PROCESS 28951

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 298. PROCESS HEAT(BTU*10**6) 20.
 NO COGENERATION SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.026 0.026	0.005 0.005	0.031 0.031	0.028 0.028	0.064 0.064	0.090 0.090	0. 0.
2. FUEL-UTILIZATION-CLE 21.	OIL-FIRED-BOILER ISLAND TOTAL	0.101 0.101	0.209 0.209	0.318 0.318	0.287 0.287	0.814 0.814	0.915 0.915	0. 0.
8. BALANCE-OF-PLANT	82. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.	0.036 0.036	0.030 0.030	0.027 0.027	0.092 0.092	0.092 0.092	0. 0.
TOTAL THIS CASE		0.127	0.250	0.379	0.341	0.970	1.097	0.
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.003 0.008 0.010	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.166 0.066 0.055	
GRAND TOTAL							1.395	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28951

ECS DEHTPM PROCESS MEGAWATTS 4.00 PROCESS TEMP. 298. PROCESS HEAT(BTU*10**6) 20.
 ADV-DIESEL-HEAT-PUMP SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 39. KW FUEL= 11397.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.036 0.036	0.007 0.007	0.044 0.044	0.039 0.039	0.090 0.090	0.127 0.127	11.129 11.129
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA 32. DIESEL-ENGINE-GENERA ISLAND TOTAL	2.337 0.050 2.387	0.241 0.006 0.247	0.241 0.005 0.246	0.217 0.005 0.222	0.698 0.016 0.714	3.035 0.066 3.102	266.338 5.805 272.142
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.032 0.032	0.067 0.067	0.102 0.102	0.092 0.092	0.262 0.262	0.294 0.294	25.823 25.823
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.073 0. 0. 0. 0.073	0.068 0.011 0.024 0.027 0.060 0.190	0.060 0.018 0.024 0.027 0.051 0.180	0.054 0.017 0.022 0.024 0.046 0.162	0.182 0.046 0.071 0.077 0.158 0.532	0.182 0.119 0.071 0.077 0.156 0.806	15.988 10.457 6.228 6.753 13.721 53.147
TOTAL THIS CASE		2.529	0.511	0.572	0.515	1.599	4.128	45.207
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.051 0.036 0.087	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.832 0.253 0.211	
GRAND TOTAL							5.311	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28951

ECS GTSOAR PROCESS MEGAWATTS 3.84

PROCESS TEMP. 298.

PROCESS HEAT(BTU*10**6) 20.

GT-HRSQ-10/1750R-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

45. KW FUEL= 13226.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	SPER-KW	
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL	
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.038	0.008	0.045	0.041	0.093	0.131	9.918	
	ISLAND TOTAL	0.038	0.008	0.045	0.041	0.093	0.131	9.918	
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	1.048	0.169	0.095	0.085	0.348	1.397	105.614	
	ISLAND TOTAL	1.048	0.169	0.095	0.085	0.348	1.397	105.614	
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	0.167	0.149	0.326	0.294	0.769	0.936	70.764	
	ISLAND TOTAL	0.167	0.149	0.326	0.294	0.769	0.936	70.764	
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.024	0.021	0.019	0.063	0.063	4.776	
	80. MASTER-CONTROL	0.022	0.003	0.006	0.005	0.014	0.036	2.740	
	81. ELECTRIC-SWITCHGEAR-	0.	0.008	0.008	0.007	0.023	0.023	1.705	
	82. INTERCONNECTING-PIPI	0.	0.016	0.016	0.014	0.045	0.045	3.422	
	83. STRUCTURES-MISCELLAN	0.	0.063	0.054	0.048	0.165	0.165	12.445	
	ISLAND TOTAL	0.022	0.113	0.103	0.093	0.310	0.332	25.088	
TOTAL THIS CASE		1.275	0.439	0.569	0.512	1.520	2.796	38.737	
INDIRECT COSTS									
	SPARES						0.026		
	START UP						0.023		
	SPARES+STARTUP						0.048		
	CONTINGENCY						0.427		
	ENGINEERING SERVICES						0.171		
	A-E FEE						0.142		
GRAND TOTAL							3.584		

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 28951

ECS STIRL PROCESS MEGAWATTS 3.39

PROCESS TEMP. 298.

PROCESS HEAT(BTU*10**6) 20.

STIRLING-1472F

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

43. KW FUEL= 12690.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	0.043 0.043	0.009 0.009	0.028 0.028	0.025 0.025	0.061 0.061	0.104 0.104	8.181 8.181
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB 29. STIRLING-ENGINE-COMB ISLAND TOTAL	1.275 0.983 2.257	0.136 0.118 0.254	0.233 0.118 0.351	0.210 0.106 0.316	0.579 0.342 0.921	1.854 1.325 3.178	146.064 104.377 250.441
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.062 0. 0. 0. 0.062	0.069 0.009 0.021 0.021 0.061 0.182	0.061 0.016 0.021 0.021 0.052 0.170	0.055 0.014 0.019 0.019 0.046 0.153	0.185 0.039 0.061 0.061 0.159 0.505	0.185 0.102 0.061 0.061 0.159 0.567	14.562 7.999 4.810 4.836 12.504 44.712
TOTAL THIS CASE		2.362	0.444	0.549	0.494	1.487	3.849	38.926
INDIRECT COSTS							0.047	
SPARES							0.034	
START UP							0.081	
SPARES+STARTUP								
CONTINGENCY							0.590	
ENGINEERING SERVICES							0.236	
A-E FEE							0.197	
GRAND TOTAL							4.952	

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PROCESS 28951

ECS STIRL PROCESS MEGAWATTS 3.39 PROCESS TEMP. 298. PROCESS HEAT(BTU*10**6) 20.
 STIRLING-1472F SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 43. KW FUEL= 12690.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD	FUEL	
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.037	0.007	0.044	0.040	0.091	0.128	10.091
	ISLAND TOTAL	0.037	0.007	0.044	0.040	0.091	0.128	10.091
2. FUEL-UTILIZATION-CLE	29. STIRLING-ENGINE-COMB	0.051	0.006	0.006	0.005	0.018	0.069	5.405
	29. STIRLING-ENGINE-COMB	0.983	0.118	0.118	0.108	0.342	1.325	104.377
	ISLAND TOTAL	1.033	0.124	0.124	0.112	0.360	1.393	109.782
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.069	0.061	0.055	0.185	0.185	14.562
	80. MASTER-CONTROL	0.062	0.009	0.016	0.014	0.039	0.102	7.999
	81. ELECTRIC-SWITCHGEAR-	0.	0.021	0.021	0.019	0.061	0.061	4.810
	82. INTERCONNECTING-PIPI	0.	0.021	0.021	0.019	0.061	0.061	4.836
	83. STRUCTURES-MISCELLAN	0.	0.061	0.052	0.046	0.159	0.159	12.504
	ISLAND TOTAL	0.062	0.182	0.170	0.153	0.505	0.567	44.712
TOTAL THIS CASE		1.133	0.313	0.338	0.305	0.956	2.089	23.998
INDIRECT COSTS								
	SPARES						0.023	
	START UP						0.018	
	SPARES+STARTUP						0.040	
	CONTINGENCY						0.319	
	ENGINEERING SERVICES						0.128	
	A-E FEE						0.106	
GRAND TOTAL							2.683	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 29112

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 1333.
N O C O G E N E R A T I SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.949	0.190	0.617	0.555	1.361	2.310	0.
	3. LIMESTONE/DOLOMITE-U	0.544	0.285	0.250	0.225	0.761	1.305	0.
	ISLAND TOTAL	1.493	0.475	0.867	0.780	2.122	3.615	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	11.727	13.694	14.719	13.247	41.659	53.386	0.
	ISLAND TOTAL	11.727	13.694	14.719	13.247	41.659	53.386	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.349	1.296	1.167	3.812	3.812	0.
	ISLAND TOTAL	0.	1.349	1.296	1.167	3.812	3.812	0.
TOTAL THIS CASE		13.220	15.517	16.882	15.194	47.593	60.813	0.
INDIRECT COSTS	SPARES						0.264	
	START UP						0.456	
	SPARES+STARTUP						0.721	
	CONTINGENCY						9.230	
	ENGINEERING SERVICES						3.692	
	A-E FEE						3.077	
GRAND TOTAL							77.532	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29112

ECS GTSOAR PROCESS MEGAWATTS 52.00

PROCESS TEMP. 470.

PROCESS HEAT(BTU*10**6) 1333.

GT-HRSG-10/1750R-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

612. KW FUEL= 179284.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.330 0.330	0.066 0.066	0.396 0.396	0.356 0.356	0.818 0.818	1.148 1.148	6.406 6.406
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	8.680 8.680	0.955 0.955	0.565 0.565	0.509 0.509	2.029 2.029	10.709 10.709	59.730 59.730
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.711 0.711	0.608 0.608	1.096 1.096	0.987 0.987	2.691 2.691	3.402 3.402	18.977 18.977
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	3.967 3.967	4.205 4.205	7.418 7.418	6.676 6.676	18.298 18.298	22.265 22.265	124.186 124.186
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.256 0. 0. 0.256	0.569 0.038 0.084 0.489 2.772	0.498 0.064 0.084 0.489 2.674	0.448 0.058 0.075 0.440 2.407	1.514 0.160 0.243 1.418 7.853	1.514 0.417 0.243 1.418 8.109	8.446 2.323 1.355 7.910 45.232
TOTAL THIS CASE		13.944	8.605	12.149	10.935	31.689	45.633	60.990
INDIRECT COSTS							0.279 0.347 0.626	
							6.939 2.776 2.313	
GRAND TOTAL							58.287	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29112

ECS PFBSTM PROCESS MEGAWATTS 109.32

PROCESS TEMP. 470.

PROCESS HEAT(BTU*10**6) 1333.

PFB-STMTB-1465/1000F

SITE FUEL* COAL-PFB

COGEN FUEL BTU*10**6=

2030. KW FUEL= 594757.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.186	0.237	0.771	0.694	1.701	2.887	4.854
	3. LIMESTONE/DOLOMITE-U	0.797	0.474	0.419	0.377	1.269	2.066	3.474
	ISLAND TOTAL	1.982	0.711	1.189	1.070	2.971	4.953	8.328
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	27.122	5.153	3.797	3.417	12.368	39.490	66.397
	ISLAND TOTAL	27.122	5.153	3.797	3.417	12.368	39.490	66.397
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	9.420	2.354	1.601	1.441	5.396	14.817	24.912
	ISLAND TOTAL	9.420	2.354	1.601	1.441	5.396	14.817	24.912
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.505	0.	0.	0.	0.	6.505	10.937
	ISLAND TOTAL	6.505	0.	0.	0.	0.	6.505	10.937
TOTAL THIS CASE		45.030	8.218	6.587	5.929	20.735	65.785	9.968
INDIRECT COSTS							0.901	
	SPARES						0.598	
	START UP						1.499	
	SPARES+STARTUP							
	CONTINGENCY						10.090	
	ENGINEERING SERVICES						4.036	
	A-E FEE						3.363	
GRAND TOTAL							84.752	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29112

ECS STM141 PROCESS MEGAWATTS 60.38 PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 1333.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1811. KW FUEL= 530585.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.074	0.215	0.698	0.628	1.542	2.616	4.930	
	3. LIMESTONE/DOLOMITE-U	0.603	0.303	0.266	0.239	0.808	1.410	2.658	
	ISLAND TOTAL	1.677	0.518	0.964	0.868	2.349	4.026	7.588	
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	23.720	5.930	4.928	4.436	15.294	39.014	73.530	
	ISLAND TOTAL	23.720	5.930	4.928	4.436	15.294	39.014	73.530	
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.753	0.	0.	0.	0.	6.753	12.728	
	ISLAND TOTAL	6.753	0.	0.	0.	0.	6.753	12.728	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.527	1.475	1.327	4.329	4.329	8.160	
	ISLAND TOTAL	0.	1.527	1.475	1.327	4.329	4.329	8.160	
TOTAL THIS CASE		32.150	7.975	7.367	6.631	21.973	54.123	12.497	
INDIRECT COSTS	-SPARES						0.643		
	START UP						0.475		
	SPARES+STARTUP						1.118		
	CONTINGENCY						8.286		
	ENGINEERING SERVICES						3.314		
	A-E FEE						2.762		
GRAND TOTAL							69.603		

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PROCESS 29112

ECS STM141 PROCESS MEGAWATTS 52.00 PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 1333.
STM-TURB-1465/1000F SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 1559. KW FUEL= 456920.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.057	0.211	0.667	0.618	1.517	2.574	5.633
	3. LIMESTONE/DOLOMITE-U	0.595	0.300	0.264	0.237	0.801	1.396	3.056
	ISLAND TOTAL	1.652	0.512	0.951	0.856	2.318	3.970	8.688
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	11.125	11.230	12.571	11.314	35.114	46.239	101.197
	ISLAND TOTAL	11.125	11.230	12.571	11.314	35.114	46.239	101.197
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	6.110	0.	0.	0.	0.	6.110	13.373
	ISLAND TOTAL	6.110	0.	0.	0.	0.	6.110	13.373
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	2.271	2.561	2.814	2.532	7.908	10.178	22.275
	ISLAND TOTAL	13.395	13.792	15.384	13.846	43.022	56.417	123.472
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.503	1.450	1.305	4.258	4.258	9.319
	ISLAND TOTAL	0.	1.503	1.450	1.305	4.258	4.258	9.319
TOTAL THIS CASE		21.157	15.006	17.786	16.007	49.598	70.755	35.032
INDIRECT COSTS							0.423	
	SPARES						0.547	
	START UP						0.971	
	SPARES+STARTUP							
	CONTINGENCY						10.759	
	ENGINEERING SERVICES						4.304	
	A-E FEE						3.586	
GRAND TOTAL							90.374	

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PROCESS 29112

ECS TIHRSG PROCESS MEGAWATTS 52.00 PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 1333.
 THERMIONIC-HRSG SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 1261. KW FUEL= 369527.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.333 0.333	0.067 0.067	0.400 0.400	0.360 0.360	0.826 0.826	1.159 1.159	3.137 3.137
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE ISLAND TOTAL	31.114 31.114	29.011 29.011	28.091 28.091	25.282 25.282	82.384 82.384	113.498 113.498	307.144 307.144
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	2.023 2.023	2.145 2.145	3.783 3.783	3.405 3.405	9.333 9.333	11.356 11.356	30.731 30.731
TOTAL THIS CASE		33.471	31.222	32.274	29.047	92.542	126.013	78.605
INDIRECT COSTS								
	SPARES						0.669	
	START UP						0.970	
	SPARES+STARTUP						1.639	
	CONTINGENCY						19.146	
	ENGINEERING SERVICES						7.659	
	A-E FEE						6.383	
GRAND TOTAL							160.842	

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PROCESS 29113

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 3042.
NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.936	0.387	1.258	1.132	2.778	4.714	0.
	3. LIMESTONE/DOLOMITE-U	1.195	0.602	0.529	0.476	1.608	2.803	0.
	ISLAND TOTAL	3.131	0.990	1.787	1.609	4.386	7.517	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	25.454	29.878	32.009	28.809	90.696	116.150	0.
	ISLAND TOTAL	25.454	29.878	32.009	28.809	90.696	116.150	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	2.752	2.719	2.447	7.919	7.919	0.
	ISLAND TOTAL	0.	2.752	2.719	2.447	7.919	7.919	0.
TOTAL THIS CASE		28.585	33.619	36.516	32.865	103.000	131.585	0.
INDIRECT COSTS								
	SPARES						0.572	
	START UP						0.987	
	SPARES+STARTUP						1.559	
	CONTINGENCY						19.972	
	ENGINEERING SERVICES						7.989	
	A-E FEE						6.657	
GRAND TOTAL							167.762	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29113

ECS FCSTCL PROCESS MEGAWATTS 808.53

PROCESS TEMP. 470.

PROCESS HEAT(BTU=10**6) 3042.

FUEL-CL-STMTB-COAL

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

7445. KW FUEL= 2181799.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA ISLAND TOTAL	3.646 3.646	0.729 0.729	2.370 2.370	2.133 2.133	5.233 5.233	8.879 8.879	4.070 4.070
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER ISLAND TOTAL	49.952 49.952	35.466 35.466	31.969 31.969	28.772 28.772	96.207 96.207	146.159 146.159	66.990 66.990
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA 30. STEAM-TURBINE-GENERA ISLAND TOTAL	81.930 15.278 97.207	24.579 0. 24.579	13.109 0. 13.109	11.798 0. 11.798	49.485 0. 49.485	131.415 15.278 146.693	60.232 7.002 67.235
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 2.620 0. 0. 0. 2.620	3.052 0.393 1.648 3.098 2.848 11.039	2.670 0.655 1.648 3.098 2.817 10.889	2.403 0.590 1.483 2.789 2.536 9.800	8.128 1.638 4.778 8.986 8.200 31.728	8.128 4.258 4.778 8.986 8.200 34.348	3.724 1.952 2.190 4.118 3.759 15.743
TOTAL THIS CASE		153.426	71.812	58.337	52.503	182.853	336.078	24.064
INDIRECT COSTS							3.069	
							2.838	
							5.904	
							51.297	
							20.519	
							17.099	
GRAND TOTAL							430.898	

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PROCESS 29113

ECS PFBSTM PROCESS MEGAWATTS 126.00

PROCESS TEMP. 470.

PROCESS HEAT(BTU*10**6) 3042.

PFB-STMTB-1465/1000F

SITE FUEL= COAL-PFB

COGEN FUEL

BTU*10**6=

2277. KW FUEL= 667146.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	2.181	0.436	1.418	1.278	3.130	5.311	7.961
	3. LIMESTONE/DOLOMITE-U	1.481	0.807	0.711	0.640	2.157	3.638	5.453
	ISLAND TOTAL	3.662	1.243	2.128	1.916	5.287	8.950	13.415
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	30.419	5.780	4.259	3.833	13.871	44.290	66.388
	ISLAND TOTAL	30.419	5.780	4.259	3.833	13.871	44.290	66.388
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	10.548	2.608	1.784	1.605	5.997	16.545	24.800
	ISLAND TOTAL	10.548	2.608	1.784	1.605	5.997	16.545	24.800
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	7.270	0.	0.	0.	0.	7.270	10.896
	ISLAND TOTAL	7.270	0.	0.	0.	0.	7.270	10.896
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	12.915	15.173	16.246	14.622	46.041	58.956	88.371
	ISLAND TOTAL	43.334	20.953	20.505	18.455	59.913	103.247	154.759
TOTAL THIS CASE		64.814	24.804	24.417	21.976	71.197	138.012	32.940
INDIRECT COSTS	SPARES						1.296	
	START UP						1.140	
	SPARES+STARTUP						2.437	
	CONTINGENCY						20.767	
	ENGINEERING SERVICES						8.307	
	A-E FEE						6.922	
GRAND TOTAL							174.445	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29113

ECS STM141 PROCESS MEGAWATTS 126.00
STM-TURB-1465/1000F SITE FUEL= COAL-FGDPROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 3042.
COGEN FUEL BTU*10**6= 3596. KW FUEL= 1053721.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	2.170	0.434	1.411	1.270	3.114	5.284	5.015
	3. LIMESTONE/DOLOMITE-U	1.475	0.805	0.709	0.638	2.152	3.627	3.442
	ISLAND TOTAL	3.645	1.239	2.119	1.908	5.266	8.911	8.457
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	26.337	26.545	29.760	26.784	83.089	109.426	103.847
	ISLAND TOTAL	26.337	26.545	29.760	26.784	83.089	109.426	103.847
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	13.896	0.	0.	0.	0.	13.896	13.187
	ISLAND TOTAL	13.896	0.	0.	0.	0.	13.896	13.187
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	3.749	4.367	4.701	4.231	13.299	17.049	16.180
	ISLAND TOTAL	30.086	30.911	34.462	31.016	96.389	126.475	120.027
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	3.085	3.062	2.756	8.903	8.903	8.449
	ISLAND TOTAL	0.	3.085	3.062	2.756	8.903	8.903	8.449
TOTAL THIS CASE		47.627	35.236	39.643	35.679	110.558	158.185	33.860
INDIRECT COSTS	SPARES						0.953	
	START UP						1.225	
	SPARES+STARTUP						2.178	
	CONTINGENCY						24.054	
	ENGINEERING SERVICES						9.622	
	A-E FEE						8.018	
GRAND TOTAL							202.057	

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I SE-PEO ADV. DES. ENGRG.

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29113

ECS T1STMT PROCESS MEGAWATTS 126.00

PROCESS TEMP. 470.

PROCESS HEAT(BTU*10**6) 3042.

T1-STMTB-1465/1000F

SITE FUEL= COAL

COGEN FUEL BTU*10**6=

1798. KW FUEL= 526849.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
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1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	2.177	0.435	1.415	1.274	3.124	5.301	10.062
	ISLAND TOTAL	2.177	0.435	1.415	1.274	3.124	5.301	10.062

3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE	48.929	51.542	46.723	42.050	140.315	189.244	359.201
	30. STEAM-TURBINE-GENERA	6.099	0.	0.	0.	0.	6.099	11.577
	ISLAND TOTAL	55.028	51.542	46.723	42.050	140.315	195.344	370.777

2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	16.595	19.451	20.858	18.772	59.081	75.675	143.637
	ISLAND TOTAL	16.595	19.451	20.858	18.772	59.081	75.675	143.637

TOTAL THIS CASE		73.800	71.429	68.995	62.096	202.520	276.320	117.863
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INDIRECT COSTS	SPARES						1.476	
	START UP						2.142	
	SPARES+STARTUP						3.618	

	CONTINGENCY						41.991	
	ENGINEERING SERVICES						18.796	
	A-E FEE						13.997	

GRAND TOTAL							352.722	
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1 SE-PEO ADV. DES. ENGRG.

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 29113

ECS T1STMT PROCESS MEGAWATTS 126.00 PROCESS TEMP. 470. PROCESS HEAT(BTU*10**6) 3042.
TI-STMTB-1465/1000F SITE FUEL* RESIDUAL COGEN FUEL BTU*10**6= 1798. KW FUEL* 526849.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.516	0.103	0.619	0.557	1.279	1.794	3.406
	ISLAND TOTAL	0.516	0.103	0.619	0.557	1.279	1.794	3.406
3. ENERGY-CONVERSION	33. THERMIONIC-BOILER/GE	44.361	37.099	36.029	32.426	105.554	149.915	284.550
	30. STEAM-TURBINE-GENERA	6.099	0.	0.	0.	0.	6.099	11.577
	ISLAND TOTAL	50.460	37.099	36.029	32.426	105.554	156.014	296.127
2. FUEL-UTILIZATION-CLE 21.	OIL-FIRED-BOILER	7.017	7.438	13.122	11.810	32.371	39.388	74.762
	ISLAND TOTAL	7.017	7.438	13.122	11.810	32.371	39.388	74.762
TOTAL THIS CASE		57.993	44.640	49.770	44.793	139.203	197.197	85.021
INDIRECT COSTS	SPARES						1.160	
	START UP						1.524	
	SPARES+STARTUP						2.684	
	CONTINGENCY						29.982	
	ENGINEERING SERVICES						11.993	
	A-E FEE						9.994	
GRAND TOTAL							251.849	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33121

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 93.
NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.095	0.019	0.062	0.056	0.136	0.231	0.
	3. LIMESTONE/DOLOMITE-U	0.081	0.092	0.083	0.075	0.251	0.332	0.
	ISLAND TOTAL	0.176	0.111	0.145	0.131	0.387	0.563	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	2.803	0.701	0.706	0.635	2.041	4.844	0.
	ISLAND TOTAL	2.803	0.701	0.706	0.635	2.041	4.844	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.135	0.119	0.107	0.360	0.360	0.
	ISLAND TOTAL	0.	0.135	0.119	0.107	0.360	0.360	0.
TOTAL THIS CASE		2.979	0.947	0.969	0.873	2.789	5.768	0.
INDIRECT COSTS	SPARES						0.060	
	START UP						0.049	
	SPARES+STARTUP						0.109	
	CONTINGENCY						0.881	
	ENGINEERING SERVICES						0.353	
	A-E FEE						0.294	
GRAND TOTAL							7.404	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33121

ECS CC1222 PROCESS MEGAWATTS 25.39

PROCESS TEMP. 448.

PROCESS HEAT(BTU*10**6) 93.

GTST-12/2200/1465-AC

SITE FUEL* RESIDUAL

COGEN FUEL BTU*10**6=

251. KW FUEL= 73479.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.102 0.102	0.020 0.020	0.122 0.122	0.110 0.110	0.253 0.253	0.355 0.355	4.828 4.828
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.777 0.900 4.677	0.491 0. 0.491	0.284 0. 0.284	0.255 0. 0.255	1.031 0. 1.031	4.807 0.900 5.707	65.426 12.249 77.675
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.405 0.405	0.353 0.353	0.702 0.702	0.631 0.631	1.686 1.686	2.091 2.091	28.452 28.452
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.056 0. 0. 0. 0.056	0.077 0.008 0.033 0.065 0.276 0.460	0.067 0.014 0.033 0.065 0.250 0.429	0.061 0.013 0.030 0.058 0.225 0.386	0.205 0.035 0.096 0.187 0.751 1.275	0.205 0.091 0.096 0.187 0.751 1.331	2.795 1.244 1.303 2.547 10.225 18.114
TOTAL THIS CASE		5.239	1.325	1.537	1.383	4.244	9.484	18.822
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.105 0.081 0.186	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.450 0.580 0.483	
GRAND TOTAL							12.184	

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33121

ECS GTSOAR PROCESS MEGAWATTS 19.89 PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 93.
 GT-HRSQ-10/1750R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 234. KW FUEL= 68563.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
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1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.098	0.020	0.118	0.106	0.243	0.341	4.970
	ISLAND TOTAL	0.098	0.020	0.118	0.106	0.243	0.341	4.970

3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	3.982	0.504	0.292	0.263	1.060	5.042	73.514
	ISLAND TOTAL	3.982	0.504	0.292	0.263	1.060	5.042	73.514

4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	0.416	0.361	0.700	0.630	1.691	2.107	30.727
	ISLAND TOTAL	0.416	0.361	0.700	0.630	1.691	2.107	30.727

8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.096	0.084	0.076	0.256	0.256	3.728
	80. MASTER-CONTROL	0.064	0.010	0.016	0.014	0.040	0.103	1.506
	81. ELECTRIC-SWITCHGEAR-	0.	0.035	0.035	0.031	0.101	0.101	1.475
	82. INTERCONNECTING-PIPI	0.	0.068	0.068	0.062	0.198	0.198	2.893
	83. STRUCTURES-MISCELLAN	0.	0.260	0.235	0.211	0.707	0.707	10.306
	ISLAND TOTAL	0.064	0.469	0.438	0.394	1.302	1.365	19.908

TOTAL THIS CASE		4.560	1.354	1.548	1.393	4.296	8.855	20.313
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INDIRECT COSTS	SPARES						0.091	
	START UP						0.075	
	SPARES+STARTUP						0.166	
	CONTINGENCY						1.353	
	ENGINEERING SERVICES						0.541	
	A-E FEE						0.451	

GRAND TOTAL							11.367	
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY
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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 33251

ECS ONOCGN PROCESS MEGAWATTS 0. PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 912.
N O C O G E N E R A T I SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW	
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.683	0.137	0.444	0.400	0.981	1.864	0.	
	3. LIMESTONE/DOLOMITE-U	0.415	0.243	0.214	0.193	0.649	1.064	0.	
	ISLAND TOTAL	1.098	0.379	0.658	0.593	1.630	2.728	0.	
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	7.945	9.287	9.975	8.978	28.240	36.184	0.	
	ISLAND TOTAL	7.945	9.287	9.975	8.978	28.240	36.184	0.	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.971	0.922	0.830	2.723	2.723	0.	
	ISLAND TOTAL	0.	0.971	0.922	0.830	2.723	2.723	0.	
TOTAL THIS CASE		9.043	10.637	11.556	10.400	32.593	41.636	0.	
INDIRECT COSTS									
	SPARES						0.181		
	START UP						0.312		
	SPARES+STARTUP						0.493		
	CONTINGENCY						6.319		
	ENGINEERING SERVICES						2.528		
	A-E FEE						2.106		
GRAND TOTAL							53.082		

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GENERAL ELECTRIC COMPANY

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PROCESS 33251

ECS CC1626 PROCESS MEGAWATTS 280.00 PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 912.
 QTST-16/2600/1465-WC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 2711. KW FUEL= 794347.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
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1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.406	0.081	0.487	0.438	1.007	1.413	1.778
	ISLAND TOTAL	0.406	0.081	0.487	0.438	1.007	1.413	1.778

3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	31.609	3.327	1.981	1.783	7.091	38.699	48.719
	30. STEAM-TURBINE-GENERA	3.579	0.	0.	0.	0.	3.579	4.505
	ISLAND TOTAL	35.187	3.327	1.981	1.783	7.091	42.278	53.224

4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	2.634	2.249	4.050	3.645	9.943	12.577	15.833
	ISLAND TOTAL	2.634	2.249	4.050	3.645	9.943	12.577	15.833

2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER,	0.034	0.071	0.109	0.098	0.278	0.313	0.394
	ISLAND TOTAL	0.034	0.071	0.109	0.098	0.278	0.313	0.394

8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.583	0.511	0.459	1.554	1.554	1.956
	80. MASTER-CONTROL	0.260	0.039	0.065	0.058	0.162	0.422	0.531
	81. ELECTRIC-SWITCHGEAR-	0.	0.295	0.295	0.265	0.855	0.855	1.076
	82. INTERCONNECTING-PIPI	0.	0.558	0.558	0.502	1.617	1.617	2.036
	83. STRUCTURES-MISCELLAN	0.	2.167	2.122	1.910	6.199	6.199	7.804
	ISLAND TOTAL	0.260	3.642	3.550	3.195	10.387	10.646	13.402

TOTAL THIS CASE		38.521	9.370	10.177	9.159	28.706	67.226	11.530
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INDIRECT COSTS	SPARES						0.770	
	START UP						0.581	
	SPARES+STARTUP						1.351	

	CONTINGENCY						10.287	
	ENGINEERING SERVICES						4.115	
	A-E FEE						3.429	

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86.408

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REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33251

ECS FCSTCL PROCESS MEGAWATTS 219.86
FUEL-CL-STMTB-COAL SITE FUEL= COAL

PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 912.
COGEN FUEL BTU*10**6= 2133. KW FUEL= 625189.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	1.238	0.248	0.805	0.724	1.776	3.014	4.822
	ISLAND TOTAL	1.238	0.248	0.805	0.724	1.776	3.014	4.822
2. FUEL-UTILIZATION-CLE	25. COAL-GASIFIER	22.588	16.038	14.457	13.011	43.505	66.094	105.718
	ISLAND TOTAL	22.588	16.038	14.457	13.011	43.505	66.094	105.718
3. ENERGY-CONVERSION	35. FUEL-CELLS-MOLTEN-CA	29.330	8.799	4.693	4.224	17.715	47.045	75.250
	30. STEAM-TURBINE-GENERA	4.207	0.	0.	0.	0.	4.207	6.729
	ISLAND TOTAL	33.537	8.799	4.693	4.224	17.715	51.252	81.979
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	1.902	1.664	1.498	5.064	5.064	8.100
	80. MASTER-CONTROL	0.889	0.133	0.222	0.200	0.556	1.445	2.311
	81. ELECTRIC-SWITCHGEAR-	0.	0.945	0.945	0.851	2.742	2.742	4.385
	82. INTERCONNECTING-PIPI	0.	1.793	1.793	1.614	5.200	5.200	8.318
	83. STRUCTURES-MISCELLAN	0.	1.760	1.709	1.538	5.007	5.007	8.009
	ISLAND TOTAL	0.889	6.534	6.334	5.701	18.569	19.458	31.123
TOTAL THIS CASE		58.252	31.618	26.288	23.659	81.566	139.818	37.843
INDIRECT COSTS							1.165	
	SPARES						1.162	
	START UP						2.327	
	SPARES+STARTUP							
	CONTINGENCY						21.322	
	ENGINEERING SERVICES						8.529	
	A-E FEE						7.107	
GRAND TOTAL							179.102	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33251

ECS STM141 PROCESS MEGAWATTS 29.62

PROCESS TEMP. 448.

PROCESS HEAT(BTU*10**6) 912.

STM-TURB-1465/1000F

SITE FUEL= COAL-FGD

COGEN FUEL BTU*10**6=

1192. KW FUEL= 349254.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.748	0.150	0.486	0.438	1.074	1.822	5.218
	3. LIMESTONE/DOLOMITE-U	0.447	0.254	0.224	0.201	0.679	1.126	3.223
	ISLAND TOTAL	1.195	0.403	0.710	0.639	1.753	2.948	8.440
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	9.279	9.318	10.485	9.437	29.240	38.520	110.291
	ISLAND TOTAL	9.279	9.318	10.485	9.437	29.240	38.520	110.291
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.191	0.	0.	0.	0.	4.191	12.001
	ISLAND TOTAL	4.191	0.	0.	0.	0.	4.191	12.001
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.064	1.013	0.912	2.989	2.989	8.558
	ISLAND TOTAL	0.	1.064	1.013	0.912	2.989	2.989	8.558
TOTAL THIS CASE		14.666	10.785	12.209	10.988	33.982	48.648	31.461
INDIRECT COSTS	SPARES						0.293	
	START UP						0.377	
	SPARES+STARTUP						0.670	
	CONTINGENCY						7.398	
	ENGINEERING SERVICES						2.959	
	A-E FEE						2.466	
GRAND TOTAL							62.140	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33254

ECS ON/COGN PROCESS MEGAWATTS 0. PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 91.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.093	0.019	0.061	0.055	0.134	0.227	0.
	3. LIMESTONE/DOLOMITE-U	0.080	0.092	0.083	0.074	0.249	0.328	0.
	ISLAND TOTAL	0.173	0.110	0.143	0.129	0.382	0.555	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	2.767	0.692	0.699	0.629	2.019	4.786	0.
	ISLAND TOTAL	2.767	0.692	0.699	0.629	2.019	4.786	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.132	0.116	0.105	0.354	0.354	0.
	ISLAND TOTAL	0.	0.132	0.116	0.105	0.354	0.354	0.
TOTAL THIS CASE		2.940	0.934	0.958	0.863	2.755	5.695	0.
INDIRECT COSTS	SPARES						0.059	
	START UP						0.048	
	SPARES+STARTUP						0.107	
	CONTINGENCY						0.870	
	ENGINEERING SERVICES						0.348	
	A-E FEE						0.290	
GRAND TOTAL							7.311	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33254

ECS CC1222 PROCESS MEGAWATTS 24.85 PROCESS TEMP. 448. PROCESS HEAT(BTU*10**6) 91.
 GTST-12/2200/1465-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 245. KW FUEL= 71698.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.101 0.101	0.020 0.020	0.121 0.121	0.109 0.109	0.250 0.250	0.350 0.350	4.872 4.872
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.706 0.887 4.593	0.484 0. 0.484	0.279 0. 0.279	0.251 0. 0.251	1.015 0. 1.015	4.721 0.887 5.608	65.658 12.337 77.995
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.399 0.399	0.348 0.348	0.693 0.693	0.624 0.624	1.666 1.666	2.065 2.065	26.717 26.717
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.055 0. 0. 0.055	0.076 0.008 0.032 0.063 0.271 0.451	0.066 0.014 0.032 0.063 0.245 0.421	0.060 0.012 0.029 0.057 0.221 0.379	0.202 0.035 0.094 0.184 0.737 1.251	0.202 0.090 0.094 0.184 0.737 1.306	2.804 1.254 1.305 2.553 10.250 18.166
TOTAL THIS CASE		5.148	1.303	1.514	1.363	4.181	9.329	18.955
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.103 0.080 0.183	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.427 0.571 0.476	
GRAND TOTAL							11.984	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS ON/COGN PROCESS MEGAWATTS 0. PROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.046	0.009	0.030	0.027	0.066	0.112	0.
	3. LIMESTONE/DOLOMITE-U	0.044	0.065	0.059	0.053	0.176	0.221	0.
	ISLAND TOTAL	0.090	0.074	0.089	0.080	0.242	0.332	0.
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	1.707	0.427	0.482	0.434	1.342	3.049	0.
	ISLAND TOTAL	1.707	0.427	0.482	0.434	1.342	3.049	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.065	0.056	0.050	0.171	0.171	0.
	ISLAND TOTAL	0.	0.065	0.056	0.050	0.171	0.171	0.
TOTAL THIS CASE		1.797	0.568	0.626	0.563	1.755	3.552	0.
INDIRECT COSTS							0.036	
	SPARES						0.030	
	START UP						0.066	
	SPARES+STARTUP						0.543	
	CONTINGENCY						0.217	
	ENGINEERING SERVICES						0.181	
	A-E FEE							
GRAND TOTAL							4.556	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS CC1222 PROCESS MEGAWATTS 10.10

PROCESS TEMP. 364.

PROCESS HEAT(BTU*10**6) 40.

GTST-12/2200/1465-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

94. KW FUEL= 27406.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.061 0.061	0.012 0.012	0.073 0.073	0.065 0.065	0.150 0.150	0.211 0.211	7.694 7.694
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	1.607 0.628 2.236	0.242 0. 0.242	0.137 0. 0.137	0.123 0. 0.123	0.501 0. 0.501	2.109 0.628 2.737	76.943 22.923 99.866
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.215 0.215	0.191 0.191	0.412 0.412	0.371 0.371	0.974 0.974	1.189 1.189	43.377 43.377
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.055 0.055	0.114 0.114	0.174 0.174	0.157 0.157	0.445 0.445	0.500 0.500	18.230 18.230
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.033 0. 0. 0. 0.033	0.036 0.005 0.014 0.030 0.127 0.213	0.032 0.008 0.014 0.030 0.112 0.196	0.028 0.007 0.013 0.027 0.101 0.176	0.096 0.021 0.041 0.088 0.340 0.585	0.096 0.054 0.041 0.088 0.340 0.618	3.499 1.954 1.507 3.211 12.394 22.564
TOTAL THIS CASE		2.599	0.772	0.991	0.892	2.655	5.255	32.547
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.052 0.044 0.096	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						0.803 0.321 0.268	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS CC1622 PROCESS MEGAWATTS 10.10 PROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
 QTST-16/2200/865--AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 94. KW FUEL= 27487.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.061 0.061	0.012 0.012	0.073 0.073	0.068 0.068	0.151 0.151	0.211 0.211	7.693 7.693
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	1.829 0.454 2.283	0.273 0. 0.273	0.155 0. 0.155	0.139 0. 0.139	0.568 0. 0.568	2.396 0.454 2.851	87.182 16.528 103.710
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.238 0.238	0.210 0.210	0.445 0.445	0.400 0.400	1.055 1.055	1.293 1.293	47.041 47.041
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.056 0.056	0.116 0.116	0.177 0.177	0.159 0.159	0.451 0.451	0.507 0.507	18.456 18.456
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.033 0. 0. 0. 0.033	0.036 0.005 0.014 0.030 0.128 0.214	0.032 0.008 0.014 0.030 0.112 0.197	0.028 0.007 0.013 0.027 0.101 0.177	0.096 0.021 0.041 0.088 0.341 0.587	0.096 0.054 0.041 0.088 0.341 0.620	3.503 1.951 1.502 3.207 12.410 22.573
TOTAL THIS CASE		2.670	0.825	1.046	0.941	2.813	5.483	34.246
INDIRECT COSTS								
	SPARES						0.053	
	START UP						0.045	
	SPARES+STARTUP						0.099	
	CONTINGENCY						0.837	
	ENGINEERING SERVICES						0.335	
	A-E FEE						0.279	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS DEADV3 PROCESS MEGAWATTS 10.10 PROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
 DIESEL-ADVANCED-3 SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 93. KW FUEL= 27220.

*****COSTS - MILLIONS 1978*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.066 0.066	0.013 0.013	0.079 0.079	0.071 0.071	0.163 0.163	0.228 0.228	8.393 8.393
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA ISLAND TOTAL	3.975 3.975	0.373 0.373	0.373 0.373	0.336 0.336	1.082 1.082	5.057 5.057	185.801 185.801
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.103 0.103	0.214 0.214	0.327 0.327	0.294 0.294	0.836 0.836	0.939 0.939	34.498 34.498
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.143 0. 0. 0. 0.143	0.162 0.022 0.057 0.068 0.144 0.452	0.142 0.036 0.057 0.068 0.126 0.429	0.128 0.032 0.051 0.061 0.114 0.386	0.431 0.090 0.165 0.198 0.384 1.268	0.431 0.233 0.165 0.198 0.384 1.411	15.846 8.557 6.069 7.277 14.102 51.850
TOTAL THIS CASE		4.288	1.053	1.208	1.087	3.348	7.636	39.950
INDIRECT COSTS							0.086	
							0.065	
							0.151	
							1.168	
							0.467	
							0.389	
GRAND TOTAL							9.812	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

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PROCESS 33314

ECS DEHTPM PROCESS MEGAWATTS 8.97 PROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
ADV-DIESEL-HEAT-PUMP SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 93. KW FUEL= 27353.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.057 0.057	0.011 0.011	0.069 0.069	0.062 0.062	0.142 0.142	0.200 0.200	7.310 7.310
3. ENERGY-CONVERSION	32. DIESEL-ENGINE-GENERA 32. DIESEL-ENGINE-GENERA ISLAND TOTAL	3.987 0.157 4.144	0.374 0.019 0.393	0.374 0.017 0.391	0.337 0.016 0.352	1.085 0.052 1.136	5.072 0.208 5.280	185.428 7.610 193.038
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.116 0. 0. 0. 0.116	0.133 0.017 0.051 0.051 0.118 0.370	0.117 0.029 0.051 0.051 0.103 0.350	0.105 0.026 0.046 0.046 0.093 0.315	0.355 0.073 0.148 0.147 0.313 1.036	0.355 0.189 0.148 0.147 0.313 1.152	12.972 6.893 5.418 5.374 11.450 42.108
TOTAL THIS CASE		4.317	0.774	0.811	0.729	2.314	6.632	26.670
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.086 0.059 0.145	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.017 0.407 0.339	
GRAND TOTAL							8.539	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS GTAC12 PROCESS MEGAWATTS 7.70
GT-HRSG-12/2200R-AC SITE FUEL= RESIDUALPROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
COGEN FUEL BTU*10**6= 86. KW FUEL= 25248.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.055 0.055	0.011 0.011	0.066 0.066	0.059 0.059	0.136 0.136	0.191 0.191	7.560 7.560
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.497 1.497	0.228 0.228	0.129 0.129	0.116 0.116	0.472 0.472	1.969 1.969	77.999 77.999
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.233 0.239	0.212 0.212	0.448 0.448	0.403 0.403	1.062 1.062	1.301 1.301	51.548 51.548
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.035 0. 0. 0. 0.035	0.041 0.005 0.015 0.029 0.110 0.200	0.036 0.009 0.015 0.029 0.096 0.184	0.032 0.008 0.013 0.026 0.086 0.166	0.109 0.022 0.043 0.085 0.292 0.550	0.109 0.056 0.043 0.085 0.292 0.585	4.333 2.237 1.686 3.352 11.555 23.163
TOTAL THIS CASE		1.826	0.651	0.826	0.744	2.220	4.046	29.452
INDIRECT COSTS							0.037	
							0.033	
							0.070	
							0.617	
							0.247	
							0.206	
GRAND TOTAL							5.186	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33314

ECS GTAC16 PROCESS MEGAWATTS 8.75 PROCESS TEMP. 364. PROCESS HEAT(BTU*10**6) 40.
 GT-HRSQ-16/2200R-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 92. KW FUEL= 27090.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.057 0.057	0.011 0.011	0.069 0.069	0.062 0.062	0.142 0.142	0.199 0.199	7.340 7.340
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.845 1.845	0.276 0.276	0.156 0.156	0.140 0.140	0.572 0.572	2.417 2.417	89.238 89.238
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.239 0.239	0.212 0.212	0.448 0.448	0.403 0.403	1.062 1.062	1.301 1.301	48.042 48.042
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.038 0. 0. 0.038	0.044 0.006 0.016 0.033 0.117 0.215	0.038 0.009 0.016 0.033 0.102 0.199	0.034 0.008 0.015 0.029 0.092 0.179	0.116 0.024 0.048 0.095 0.311 0.593	0.116 0.081 0.048 0.095 0.311 0.631	4.287 2.261 1.766 3.504 11.462 23.281
TOTAL THIS CASE		2.180	0.714	0.871	0.784	2.369	4.548	28.934
INDIRECT COSTS								
	SPARES						0.044	
	START UP						0.038	
	SPARES+STARTUP						0.081	
	CONTINGENCY						0.694	
	ENGINEERING SERVICES						0.278	
	A-E FEE						0.231	
GRAND TOTAL							5.833	

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PROCESS 33314

ECS GTSOAD PROCESS MEGAWATTS 7.43

PROCESS TEMP. 364.

PROCESS HEAT(BTU*10**6) 40.

GT-HRS0-10/2000D-AC

SITE FUEL= DISTILLA

COGEN FUEL BTU*10**6=

87. KW FUEL= 25438.

		*****COSTS - MILLIONS 1978\$*****						
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.055 0.055	0.011 0.011	0.066 0.066	0.059 0.059	0.137 0.137	0.192 0.192	7.536 7.536
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	1.255 1.255	0.188 0.188	0.107 0.107	0.096 0.096	0.391 0.391	1.646 1.646	64.696 64.696
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.239 0.239	0.212 0.212	0.448 0.448	0.403 0.403	1.062 1.062	1.301 1.301	51.162 51.162
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.041	0.036	0.033	0.110	0.110	4.328
	80. MASTER-CONTROL	0.034	0.005	0.008	0.008	0.021	0.055	2.170
	81. ELECTRIC-SWITCHGEAR-	0.	0.014	0.014	0.013	0.041	0.041	1.619
	82. INTERCONNECTING-PIPI	0.	0.028	0.028	0.025	0.082	0.082	3.221
	83. STRUCTURES-MISCELLAN	0.	0.111	0.096	0.087	0.294	0.294	11.545
	ISLAND TOTAL	0.034	0.199	0.184	0.165	0.548	0.582	22.884
TOTAL THIS CASE		1.583	0.611	0.804	0.723	2.138	3.721	28.437
INDIRECT COSTS							0.032	
	SPARES						0.030	
	START UP						0.062	
	SPARES+STARTUP							
	CONTINGENCY						0.567	
	ENGINEERING SERVICES						0.227	
	A-E FEE						0.189	
GRAND TOTAL							4.766	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33315

ECS ONCOGN PROCESS MEGAWATTS 0. PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 60.
 NO COGENERATION SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

		*****COSTS - MILLIONS 1978*****							
ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLED	TOTAL	\$PER-KW FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.065	0.013	0.042	0.038	0.093	0.156	0.	
	3. LIMESTONE/DOLOMITE-U	0.059	0.077	0.070	0.063	0.209	0.268	0.	
	ISLAND TOTAL	0.124	0.090	0.112	0.101	0.302	0.427	0.	
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	2.166	0.542	0.579	0.521	1.641	3.807	0.	
	ISLAND TOTAL	2.166	0.542	0.579	0.521	1.641	3.807	0.	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	0.092	0.080	0.072	0.245	0.245	0.	
	ISLAND TOTAL	0.	0.092	0.080	0.072	0.245	0.245	0.	
TOTAL THIS CASE		2.290	0.724	0.771	0.694	2.188	4.476	0.	
INDIRECT COSTS							0.046		
	SPARES						0.038		
	START UP						0.084		
	SPARES+STARTUP						0.664		
	CONTINGENCY						0.274		
	ENGINEERING SERVICES						0.228		
	A-E FEE								
GRAND TOTAL							5.748		

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PROCESS 33315

ECS CC1222 PROCESS MEGAWATTS 18.50

PROCESS TEMP. 366.

PROCESS HEAT(BTU*10**6) 60.

GTST-12/2200/1465-AC

SITE FUEL= RESIDUAL

COGEN FUEL BTU*10**6=

172. KW FUEL= 50275.

		*****COSTS - MILLIONS 1978*****						
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	\$PER-KW
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLED		FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S	0.082	0.016	0.098	0.088	0.203	0.285	5.666
	ISLAND TOTAL	0.082	0.016	0.098	0.088	0.203	0.285	5.666
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO	2.719	0.374	0.214	0.193	0.781	3.500	69.612
	30. STEAM-TURBINE-GENERA	0.938	0.	0.	0.	0.	0.938	18.648
	ISLAND TOTAL	3.656	0.374	0.214	0.193	0.781	4.437	88.260
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM-	0.317	0.279	0.571	0.514	1.365	1.682	33.457
	ISLAND TOTAL	0.317	0.279	0.571	0.514	1.365	1.682	33.457
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER	0.006	0.013	0.020	0.018	0.050	0.057	1.126
	ISLAND TOTAL	0.006	0.013	0.020	0.018	0.050	0.057	1.126
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR	0.	0.056	0.049	0.044	0.149	0.149	2.963
	80. MASTER-CONTROL	0.046	0.007	0.012	0.010	0.029	0.075	1.488
	81. ELECTRIC-SWITCHGEAR-	0.	0.025	0.025	0.022	0.072	0.072	1.427
	82. INTERCONNECTING-PIPI	0.	0.049	0.049	0.044	0.141	0.141	2.805
	83. STRUCTURES-MISCELLAN	0.	0.199	0.178	0.160	0.538	0.538	10.692
	ISLAND TOTAL	0.046	0.336	0.312	0.281	0.928	0.974	19.374
TOTAL THIS CASE		4.108	1.018	1.215	1.094	3.327	7.435	21.758
INDIRECT COSTS							0.082	
	SPARES						0.063	
	START UP						0.146	
	SPARES+STARTUP							
	CONTINGENCY						1.137	
	ENGINEERING SERVICES						0.455	
	A-E FEE						0.379	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33315

ECS CC1622 PROCESS MEGAWATTS 18.50 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 60.
GTST-16/2200/865--AC SITE FUEL* RESIDUAL COGEN FUEL BTU*10**6= 172. KW FUEL= 50421.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.082 0.082	0.016 0.016	0.099 0.099	0.089 0.089	0.204 0.204	0.286 0.286	5.667 5.667
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.087 0.704 3.792	0.423 0. 0.423	0.242 0. 0.242	0.218 0. 0.218	0.883 0. 0.883	3.970 0.704 4.674	78.738 13.967 92.705
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.341 0.341	0.299 0.299	0.604 0.604	0.544 0.544	1.447 1.447	1.788 1.788	35.463 35.463
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.011 0.011	0.023 0.023	0.036 0.036	0.032 0.032	0.091 0.091	0.103 0.103	2.034 2.034
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.046 0. 0. 0. 0.046	0.056 0.007 0.025 0.049 0.200 0.337	0.049 0.012 0.025 0.049 0.179 0.313	0.044 0.010 0.022 0.044 0.161 0.282	0.150 0.029 0.072 0.141 0.540 0.932	0.150 0.075 0.072 0.141 0.540 0.978	2.968 1.486 1.422 2.802 10.711 19.389
TOTAL THIS CASE		4.272	1.098	1.294	1.164	3.556	7.828	23.094
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.085 0.067 0.152	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.197 0.479 0.399	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33315

ECS CC1626 PROCESS MEGAWATTS 18.50
QTST-16/2600/1465-WC SITE FUEL= RESIDUALPROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 60.
COGEN FUEL BTU*10**6= 169. KW FUEL= 49863.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.083 0.083	0.017 0.017	0.100 0.100	0.090 0.090	0.207 0.207	0.290 0.290	5.840 5.840
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO 30. STEAM-TURBINE-GENERA ISLAND TOTAL	3.175 0.791 3.967	0.453 0. 0.453	0.258 0. 0.258	0.232 0. 0.232	0.943 0. 0.943	4.118 0.791 4.910	82.928 15.935 98.863
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.301 0.301	0.265 0.265	0.546 0.546	0.492 0.492	1.303 1.303	1.604 1.604	32.294 32.294
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.051 0.051	0.106 0.106	0.161 0.161	0.145 0.145	0.412 0.412	0.463 0.463	9.323 9.323
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.047 0. 0. 0. 0.047	0.057 0.007 0.025 0.050 0.205 0.344	0.050 0.012 0.025 0.050 0.183 0.320	0.045 0.011 0.022 0.045 0.165 0.288	0.153 0.029 0.072 0.146 0.553 0.953	0.153 0.077 0.072 0.146 0.553 1.000	3.079 1.544 1.444 2.940 11.126 20.133
TOTAL THIS CASE		4.449	1.184	1.366	1.247	3.817	8.267	25.113
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.089 0.070 0.159	
	CONTINGENCY ENGINEERING SERVICES A-E FEE						1.264 0.506 0.421	

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CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33315

ECS STIG15 PROCESS MEGAWATTS 18.50 PROCESS TEMP. 366. PROCESS HEAT(BTU*10**6) 60.
STIG-15-16/2200F-AC SITE FUEL= RESIDUAL COGEN FUEL BTU*10**6= 166. KW FUEL= 48549.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	1. FUEL-OIL-UNLOADING-S ISLAND TOTAL	0.098 0.098	0.020 0.020	0.117 0.117	0.106 0.106	0.243 0.243	0.341 0.341	7.015 7.015
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	3.284 3.284	0.367 0.367	0.272 0.272	0.245 0.245	0.863 0.863	4.168 4.168	85.844 85.844
4. BOTTOMING-CYCLE	40. HEAT-RECOVERY-STEAM- ISLAND TOTAL	0.261 0.261	0.230 0.230	0.481 0.481	0.433 0.433	1.145 1.145	1.405 1.405	28.947 28.947
3. ENERGY-CONVERSION	31. GAS-TURBINE-GENERATO ISLAND TOTAL	0.062 3.347	0.031 0.398	0.037 0.309	0.034 0.278	0.102 0.985	0.164 4.332	3.383 89.227
2. FUEL-UTILIZATION-CLE	21. OIL-FIRED-BOILER ISLAND TOTAL	0.193 0.193	0.400 0.400	0.611 0.611	0.550 0.550	1.561 1.561	1.754 1.754	36.127 36.127
8. BALANCE-OF-PLANT	84. POWER-PLANT-STRUCTUR 80. MASTER-CONTROL 81. ELECTRIC-SWITCHGEAR- 82. INTERCONNECTING-PIPI 83. STRUCTURES-MISCELLAN ISLAND TOTAL	0. 0.056 0. 0. 0. 0.056	0.073 0.008 0.025 0.064 0.260 0.430	0.064 0.014 0.025 0.064 0.235 0.401	0.057 0.013 0.022 0.058 0.211 0.361	0.193 0.035 0.072 0.186 0.706 1.192	0.193 0.091 0.072 0.186 0.706 1.248	3.985 1.872 1.477 3.822 14.541 25.697
TOTAL THIS CASE		3.954	1.478	1.919	1.728	5.125	9.079	35.583
INDIRECT COSTS	SPARES START UP SPARES+STARTUP						0.079 0.074 0.153	
	CONTINGENCY						1.385	

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PROCESS 33344

ECS ON/COGN PROCESS MEGAWATTS 0. PROCESS TEMP. 495. PROCESS HEAT(BTU*10**6) 980.
 NO COGENERATION SITE FUEL= COAL-FGD COGEN FUEL BTU*10**6= 0. KW FUEL= 0.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	SPER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.727	0.145	0.473	0.425	1.044	1.771	0.
	3. LIMESTONE/DOLOMITE-U	0.436	0.250	0.221	0.199	0.669	1.106	0.
	ISLAND TOTAL	1.164	0.396	0.693	0.624	1.713	2.877	0.
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	8.307	9.738	10.441	9.397	29.576	37.883	0.
	ISLAND TOTAL	8.307	9.738	10.441	9.397	29.576	37.883	0.
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.034	0.983	0.885	2.902	2.902	0.
	ISLAND TOTAL	0.	1.034	0.983	0.885	2.902	2.902	0.
TOTAL THIS CASE		9.471	11.167	12.118	10.908	34.191	43.662	0.
INDIRECT COSTS	SPARES						0.169	
	START UP						0.328	
	SPARES+STARTUP						0.517	
	CONTINGENCY						6.627	
	ENGINEERING SERVICES						2.651	
	A-E FEE						2.209	
GRAND TOTAL							55.665	

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PROCESS 33344

ECS PFBSTM PROCESS MEGAWATTS 69.83

PROCESS TEMP. 495.

PROCESS HEAT(BTU*10**6) 980.

PFB-STMTB-1465/1000F

SITE FUEL= COAL-PFB

COGEN FUEL BTU*10**6=

1452. KW FUEL= 425519.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.888	0.178	0.577	0.519	1.274	2.162	3.080
	3. LIMESTONE/DOLOMITE-U	0.515	0.276	0.243	0.218	0.737	1.252	2.941
	ISLAND TOTAL	1.402	0.453	0.820	0.738	2.011	3.413	8.021
2. FUEL-UTILIZATION-CLE	24. COAL-FIRED-PFB-BOILE	21.264	4.040	2.977	2.679	9.697	30.961	72.761
	ISLAND TOTAL	21.264	4.040	2.977	2.679	9.697	30.961	72.761
4. BOTTOMING-CYCLE	43. EXPANSION-TURBINE-GE	7.440	2.061	1.399	1.259	4.719	12.159	28.575
	ISLAND TOTAL	7.440	2.061	1.399	1.259	4.719	12.159	28.575
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.457	0.	0.	0.	0.	4.457	10.475
	ISLAND TOTAL	4.457	0.	0.	0.	0.	4.457	10.475
TOTAL THIS CASE		34.565	6.554	5.196	4.678	16.426	50.991	10.989
INDIRECT COSTS	SPARES						0.691	
	START UP						0.463	
	SPARES+STARTUP						1.154	
	CONTINGENCY						7.822	
	ENGINEERING SERVICES						3.129	
	A-E FEE						2.607	
GRAND TOTAL							65.703	

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1 SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33344

ECS STM141 PROCESS MEGAWATTS 34.52 PROCESS TEMP. 495. PROCESS HEAT(BTU*10**6) 980.
 STM-TURB-1465/1000F SITE FUEL= COAL-AFB COGEN FUEL BTU*10**6= 1291. KW FUEL= 378460.

*****COSTS - MILLIONS 1978\$*****

ISLAND DESCRIPTION	COMPONENT DESCRIPTION	MAJOR EQUIPMNT	INSTALL MAT'L	INSTALL LABOR	INDRCT FLD CST	TOTAL INSTALLD	TOTAL	\$PER-KW FUEL
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.802	0.160	0.521	0.469	1.151	1.953	5.181
	3. LIMESTONE/DOLOMITE-U	0.473	0.262	0.231	0.208	0.702	1.175	3.105
	ISLAND TOTAL	1.276	0.423	0.753	0.677	1.853	3.128	8.266
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	17.272	4.318	3.613	3.252	11.183	28.455	75.186
	ISLAND TOTAL	17.272	4.318	3.613	3.252	11.183	28.455	75.186
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.644	0.	0.	0.	0.	4.644	12.271
	ISLAND TOTAL	4.644	0.	0.	0.	0.	4.644	12.271
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.140	1.089	0.980	3.209	3.209	8.480
	ISLAND TOTAL	0.	1.140	1.089	0.980	3.209	3.209	8.480
TOTAL THIS CASE		23.191	5.881	5.455	4.909	16.245	39.436	12.972
INDIRECT COSTS	SPARES						0.464	
	START UP						0.345	
	SPARES+STARTUP						0.809	
	CONTINGENCY						6.037	
	ENGINEERING SERVICES						2.415	
	A-E FEE						2.012	
GRAND TOTAL							50.709	

GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

I SE-PEO ADV. DES. ENGRG.

REPORT 5.3

CAPITAL COSTS BY ISLAND FOR SELECTED PROCESS-ECS MATCHES

PROCESS 33344

ECS STM141

PROCESS MEGAWATTS 30.29

PROCESS TEMP. 495.

PROCESS HEAT(BTU*10**6) 980.

STM-TURB-1465/1000F

SITE FUEL= COAL-AFB

COGEN FUEL BTU*10**6=

1133. KW FUEL= 332114.

		*****COSTS - MILLIONS 1978\$*****							
ISLAND	COMPONENT	MAJOR	INSTALL	INSTALL	INDRCT	TOTAL	TOTAL	SPER-KW	
DESCRIPTION	DESCRIPTION	EQUIPMNT	MAT'L	LABOR	FLD CST	INSTALLD		FUEL	
1. FUEL-HANDLING	2. COAL-UNLOAD-STORE-HA	0.793	0.159	0.516	0.464	1.138	1.931	5.815	
	3. LIMESTONE/DOLOMITE-U	0.469	0.261	0.230	0.207	0.698	1.167	3.513	
	ISLAND TOTAL	1.262	0.420	0.745	0.671	1.836	3.098	9.328	
2. FUEL-UTILIZATION-CLE	23. COAL-FIRED-AFB-BOILE	13.537	3.384	2.728	2.456	8.568	22.105	66.558	
	ISLAND TOTAL	13.537	3.384	2.728	2.456	8.568	22.105	66.558	
3. ENERGY-CONVERSION	30. STEAM-TURBINE-GENERA	4.255	0.	0.	0.	0.	4.255	12.812	
	ISLAND TOTAL	4.255	0.	0.	0.	0.	4.255	12.812	
2. FUEL-UTILIZATION-CLE	22. COAL-FIRED-BOILER	1.736	1.925	2.137	1.924	5.986	7.721	23.249	
	ISLAND TOTAL	15.272	5.309	4.866	4.379	14.554	29.826	89.807	
8. BALANCE-OF-PLANT	83. STRUCTURES-MISCELLAN	0.	1.127	1.076	0.968	3.172	3.172	9.551	
	ISLAND TOTAL	0.	1.127	1.076	0.968	3.172	3.172	9.551	
TOTAL THIS CASE		20.789	6.856	6.687	6.018	19.562	40.351	18.122	
INDIRECT COSTS	SPARES						0.416		
	START UP						0.343		
	SPARES+STARTUP						0.759		
	CONTINGENCY						6.167		
	ENGINEERING SERVICES						2.467		
	A-E FEE						2.056		
GRAND TOTAL							51.799		

COAL-FIRED NOCOGENERATION PROCESS BOILER

5.4 - ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST							PERCENT OF ORIGINAL COST 100										*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****		
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	GEN/	ANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	HEAT	COST	REQD													
		MW		RATIO	*10**6		INSNC		ELEC										
10101 ONOCCN COAL-FG	10.	0.	0.	0.25	12.3	0.93	0.40	0.83	0.74	3.08	0.	5.97	1.000	0.	0	0			
10101 STH141 RESIDUA	10.	0.99	0.439	0.25	8.3	0.63	0.27	0.57	2.42	0.03	0.	3.93	0.658	8.	999	0			
10101 STH141 COAL-FG	10.	0.99	0.439	0.25	16.2	1.23	0.52	1.08	1.41	0.03	0.	4.27	0.715	3.	28	4			
10101 STH141 COAL-AF	10.	0.99	0.439	0.25	12.5	0.95	0.40	0.96	1.41	0.03	0.	3.74	0.626	7.	999	1			
10101 STH088 RESIDUA	10.	0.75	0.333	0.25	7.4	0.56	0.24	0.54	2.15	0.76	0.	4.26	0.713	8.	999	0			
10101 STH088 COAL-FG	10.	0.75	0.333	0.25	14.9	1.13	0.48	1.02	1.25	0.76	0.	4.65	0.778	3.	31	4			
10101 STH088 COAL-AF	10.	0.75	0.333	0.25	11.8	0.89	0.38	0.92	1.25	0.76	0.	4.20	0.704	6.	999	0			
10101 PFDSTM COAL-PF	10.	1.00	0.436	0.25	20.8	1.58	0.67	1.59	1.43	0.	0.	5.27	0.882	-2.	10	9			
10101 PFDSTM COAL-PF	10.	1.52	0.484	0.25	19.9	1.51	0.64	1.45	1.79	0.	-0.96	4.44	0.744	1.	17	6			
10101 TISTMT RESIDUA	10.	1.00	0.187	0.25	29.6	2.25	0.96	1.27	3.55	0.	0.	8.02	1.344	-15.	0	83			
10101 TISTMT RESIDUA	10.	0.54	0.235	0.25	20.5	1.55	0.66	1.01	1.91	1.42	0.	6.56	1.099	-6.	0	999			
10101 TISTMT COAL	10.	1.00	0.436	0.25	41.4	3.14	1.34	1.96	1.43	0.	0.	7.88	1.319	-20.	0	999			
10101 TISTMT COAL	10.	1.99	0.510	0.25	57.1	4.33	1.84	2.15	2.12	0.	-1.83	8.61	1.441	-30.	0	999			
10101 TIHRSG RESIDUA	10.	0.23	0.003	0.25	17.5	1.30	0.55	0.84	1.62	2.37	0.	6.68	1.119	-5.	0	68			
10101 TIHRSG COAL	10.	0.65	0.306	0.25	48.1	3.65	1.55	1.76	1.49	0.47	0.	8.92	1.494	-26.	0	999			
10101 STIRL DISTILL	10.	1.00	0.148	0.25	11.1	0.82	0.35	0.77	4.56	0.	0.	6.51	1.090	-1.	-26	0			
10101 STIRL DISTILL	10.	0.63	0.201	0.25	9.3	0.69	0.29	0.70	2.86	1.15	0.	5.69	0.953	2.	999	0			
10101 STIRL RESIDUA	10.	1.00	0.148	0.25	11.1	0.83	0.35	0.77	3.72	0.	0.	5.67	0.949	2.	999	0			
10101 STIRL RESIDUA	10.	0.63	0.201	0.25	9.3	0.69	0.29	0.70	2.33	1.15	0.	5.16	0.865	4.	999	0			
10101 STIRL COAL	10.	1.00	0.321	0.25	21.9	1.62	0.69	1.44	1.72	0.	0.	5.47	0.917	-3.	9	10			
10101 STIRL COAL	10.	2.32	0.385	0.25	28.1	2.08	0.88	1.43	3.02	0.	-2.43	4.98	0.834	-4.	9	9			
10101 HEGT85 COAL-AF	10.	1.00	0.178	0.25	35.4	2.68	1.14	1.69	2.09	0.	0.	7.60	1.273	-16.	0	999			
10101 HEGT85 COAL-AF	10.	6.10	0.235	0.25	91.7	6.96	2.96	3.34	8.97	0.	-9.43	12.80	2.144	-60.	0	999			
10101 HEGT60 COAL-AF	10.	1.00	0.191	0.25	34.0	2.58	1.10	1.66	2.05	0.	0.	7.38	1.237	-15.	0	999			
10101 HEGT60 COAL-AF	10.	3.00	0.236	0.25	55.1	4.18	1.78	2.12	4.69	0.	-3.70	9.08	1.520	-30.	0	999			
10101 HEGT00 COAL-AF	10.	1.00	0.186	0.25	31.2	2.37	1.01	1.56	2.07	0.	0.	7.01	1.173	-12.	0	999			
10101 HEGT00 COAL-AF	10.	1.40	0.203	0.25	33.4	2.53	1.08	1.41	2.60	0.	-0.74	6.88	1.152	-13.	0	26			
10101 FCHCCL COAL	10.	1.00	0.403	0.25	29.8	2.32	0.99	1.72	3.56	0.	0.	8.58	1.437	-17.	0	74			
10101 FCHCCL COAL	10.	2.57	0.092	0.25	40.3	3.13	1.33	2.09	4.88	0.	-2.90	8.53	1.428	-22.	0	999			
10101 FCSTCL COAL	10.	1.00	0.388	0.25	29.0	2.25	0.96	1.73	3.52	0.	0.	8.47	1.418	-16.	0	74			
10101 FCSTCL COAL	10.	4.18	0.266	0.25	50.3	3.91	1.66	2.65	6.06	0.	-5.87	8.41	1.409	-27.	0	999			
10101 IGGTST COAL	10.	1.00	0.465	0.25	28.9	2.25	0.96	1.61	3.72	0.	0.	8.53	1.429	-16.	0	72			
10101 IGGTST COAL	10.	2.95	0.065	0.25	40.4	3.14	1.34	1.64	5.65	0.	-3.60	8.18	1.370	-21.	0	999			
10101 GTSQAR RESIDUA	10.	1.00	0.216	0.25	10.6	0.76	0.33	0.71	3.42	0.	0.	5.25	0.879	3.	999	0			
10101 GTSQAR RESIDUA	10.	0.71	0.238	0.25	9.6	0.71	0.30	0.67	2.43	0.89	0.	5.00	0.838	4.	999	0			
10101 GTAC08 RESIDUA	10.	1.00	0.158	0.25	9.6	0.71	0.30	0.68	3.68	0.	0.	5.37	0.899	3.	999	0			
10101 GTAC08 RESIDUA	10.	0.57	0.215	0.25	8.3	0.62	0.26	0.63	2.10	1.32	0.	4.93	0.826	5.	999	0			
10101 GTAC12 RESIDUA	10.	1.00	0.235	0.25	9.8	0.72	0.31	0.68	3.26	0.	0.	4.97	0.832	4.	999	0			
10101 GTAC12 RESIDUA	10.	0.71	0.265	0.25	8.8	0.65	0.28	0.65	2.30	0.90	0.	4.78	0.801	5.	999	0			
10101 GTAC16 RESIDUA	10.	1.00	0.296	0.25	10.1	0.75	0.32	0.69	3.07	0.	0.	4.83	0.810	5.	999	0			
10101 GTAC16 RESIDUA	10.	0.79	0.295	0.25	9.4	0.70	0.30	0.66	2.44	0.63	0.	4.73	0.792	5.	999	0			
10101 GTWC16 RESIDUA	10.	1.00	0.279	0.25	10.4	0.77	0.33	0.70	3.15	0.	0.	4.95	0.830	4.	999	0			
10101 GTWC16 RESIDUA	10.	0.85	0.280	0.25	9.9	0.73	0.31	0.68	2.67	0.48	0.	4.87	0.815	5.	999	0			

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.4

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	HEAT COST	INSNC	ELEC	WORTH	%	PAY										
		MW	REQD	RATIO *10**6			15%		BACK										
10101 CC1626 RESIDUA	10.	1.00	0.331	0.25	10.7	0.81	0.34	0.80	2.92	0.	0.	4.87	0.816	4.	999	0			
10101 CC1626 RESIDUA	10.	1.41	0.362	0.25	12.1	0.92	0.39	0.86	3.61	0.	-0.76	5.01	0.839	3.	999	0			
10101 CC1622 RESIDUA	10.	1.00	0.347	0.25	10.4	0.79	0.33	0.79	2.85	0.	0.	4.76	0.798	5.	999	0			
10101 CC1622 RESIDUA	10.	1.27	0.370	0.25	11.3	0.86	0.37	0.83	3.29	0.	-0.50	4.84	0.810	4.	999	0			
10101 CC1222 RESIDUA	10.	1.00	0.350	0.25	10.1	0.77	0.33	0.78	2.84	0.	0.	4.71	0.790	5.	999	0			
10101 CC1222 RESIDUA	10.	1.27	0.373	0.25	11.0	0.84	0.36	0.82	3.26	0.	-0.50	4.78	0.800	4.	999	0			
10101 CC0822 RESIDUA	10.	1.00	0.375	0.25	10.2	0.78	0.33	0.78	2.73	0.	0.	4.62	0.774	5.	999	0			
10101 CC0822 RESIDUA	10.	1.02	0.377	0.25	10.3	0.78	0.33	0.79	2.76	0.	-0.03	4.62	0.774	5.	999	0			
10101 STIG15 RESIDUA	10.	1.00	0.123	0.25	10.7	0.79	0.34	0.81	3.83	0.	0.	5.77	0.966	2.	999	0			
10101 STIG15 RESIDUA	10.	31.78	0.171	0.25	97.7	7.23	3.08	5.91	82.83	0.	-56.87	42.18	7.065	-154.	0	59			
10101 STIG10 RESIDUA	10.	1.00	0.176	0.25	10.2	0.76	0.32	0.77	3.60	0.	0.	5.45	0.912	3.	999	0			
10101 STIG10 RESIDUA	10.	2.94	0.218	0.25	16.0	1.19	0.50	1.09	8.13	0.	-3.58	7.33	1.228	-6.	0	59			
10101 STIG15 RESIDUA	10.	1.00	0.200	0.25	10.0	0.74	0.32	0.76	3.49	0.	0.	5.32	0.891	3.	999	0			
10101 STIG15 RESIDUA	10.	1.72	0.228	0.25	12.2	0.91	0.39	0.89	5.11	0.	-1.34	5.96	0.998	0.	0	0			
10101 DEADV3 RESIDUA	10.	1.00	0.265	0.25	13.3	0.98	0.42	0.82	3.21	0.	0.	5.43	0.909	1.	46	3			
10101 DEADV3 RESIDUA	10.	1.73	0.302	0.25	16.6	1.23	0.52	0.94	4.62	0.	-1.34	5.98	1.002	-2.	5	14			
10101 DEHTPM RESIDUA	10.	1.00	0.351	0.25	13.0	0.97	0.41	0.84	2.83	0.	0.	5.05	0.846	3.	101	1			
10101 DEHTPM RESIDUA	10.	0.88	0.344	0.25	12.5	0.93	0.39	0.82	2.49	0.38	0.	5.01	0.839	3.	999	0			
10101 DESOA3 DISTILL	10.	1.00	0.228	0.25	13.9	1.03	0.44	0.84	4.14	0.	0.	6.44	1.079	-2.	0	59			
10101 DESOA3 DISTILL	10.	1.97	0.266	0.25	21.3	1.58	0.67	1.08	6.64	0.	-1.79	8.18	1.370	-11.	0	61			
10101 DESOA3 RESIDUA	10.	1.00	0.228	0.25	13.9	1.03	0.44	0.84	3.37	0.	0.	5.68	0.952	0.	18	6			
10101 DESOA3 RESIDUA	10.	1.97	0.266	0.25	21.3	1.58	0.67	1.08	5.41	0.	-1.79	6.96	1.165	-7.	0	87			
10101 GTSOAD DISTILL	10.	1.00	0.222	0.25	9.3	0.69	0.29	0.67	4.17	0.	0.	5.83	0.976	2.	0	0			
10101 GTSOAD DISTILL	10.	0.68	0.244	0.25	8.4	0.62	0.27	0.64	2.82	1.00	0.	5.34	0.895	4.	999	0			
10101 GTRA08 DISTILL	10.	1.00	0.344	0.25	11.0	0.82	0.35	0.72	3.51	0.	0.	5.39	0.903	3.	999	0			
10101 GTRA08 DISTILL	10.	1.07	0.351	0.25	11.3	0.84	0.36	0.73	3.65	0.	-0.13	5.44	0.911	2.	999	0			
10101 GTRA12 DISTILL	10.	1.00	0.350	0.25	11.0	0.81	0.35	0.72	3.48	0.	0.	5.36	0.897	3.	999	0			
10101 GTRA12 DISTILL	10.	1.06	0.355	0.25	11.2	0.83	0.35	0.72	3.59	0.	-0.10	5.39	0.903	2.	999	0			
10101 GTRA16 DISTILL	10.	1.00	0.349	0.25	11.3	0.84	0.36	0.72	3.49	0.	0.	5.41	0.906	2.	999	0			
10101 GTRA16 DISTILL	10.	0.99	0.348	0.25	11.3	0.84	0.36	0.72	3.46	0.02	0.	5.40	0.905	2.	999	0			
10101 GTR208 DISTILL	10.	1.00	0.290	0.25	10.4	0.77	0.33	0.70	3.80	0.	0.	5.61	0.939	2.	999	0			
10101 GTR208 DISTILL	10.	0.83	0.290	0.25	9.8	0.73	0.31	0.68	3.16	0.52	0.	5.40	0.905	3.	999	0			
10101 GTR212 DISTILL	10.	1.00	0.311	0.25	10.7	0.79	0.34	0.71	3.69	0.	0.	5.53	0.926	2.	999	0			
10101 GTR212 DISTILL	10.	0.89	0.309	0.25	10.3	0.76	0.32	0.69	3.29	0.33	0.	5.40	0.905	3.	999	0			
10101 GTR216 DISTILL	10.	1.00	0.326	0.25	10.9	0.81	0.34	0.71	3.61	0.	0.	5.48	0.918	2.	999	0			
10101 GTR216 DISTILL	10.	0.91	0.323	0.25	10.6	0.78	0.33	0.70	3.30	0.27	0.	5.38	0.902	3.	999	0			
10101 GTRW08 DISTILL	10.	1.00	0.288	0.25	11.1	0.82	0.35	0.72	3.81	0.	0.	5.71	0.956	2.	999	0			
10101 GTRW08 DISTILL	10.	1.29	0.308	0.25	12.2	0.90	0.38	0.76	4.46	0.	-0.53	5.98	1.001	0.	-6	0			
10101 GTRW12 DISTILL	10.	1.00	0.306	0.25	11.1	0.82	0.35	0.72	3.72	0.	0.	5.61	0.940	2.	999	0			
10101 GTRW12 DISTILL	10.	1.32	0.329	0.25	12.3	0.91	0.39	0.77	4.41	0.	-0.59	5.88	0.985	0.	999	0			
10101 GTRW16 DISTILL	10.	1.00	0.309	0.25	11.4	0.84	0.36	0.73	3.70	0.	0.	5.63	0.943	2.	999	0			
10101 GTRW16 DISTILL	10.	1.23	0.327	0.25	12.3	0.91	0.39	0.76	4.21	0.	-0.43	5.83	0.977	1.	999	0			
10101 GTR308 DISTILL	10.	1.00	0.267	0.25	10.6	0.78	0.33	0.71	3.93	0.	0.	5.76	0.964	2.	999	0			
10101 GTR308 DISTILL	10.	0.98	0.267	0.25	10.5	0.78	0.33	0.71	3.84	0.07	0.	5.73	0.959	2.	999	0			

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OF POOR QUALITY

DATE 06/07/79
I&SE-PEG-ADV-ENERGY-SYS

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.4

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST								PERCENT OF ORIGINAL COST 100											
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REGD	GEN/	REGR	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH	%	PAY								
		MW							15X		BACK								
10101 GTR312 DISTILL	10.	1.00	0.312	0.25	10.7	0.79	0.34	0.71	3.69	0.	0.	5.53	0.925	2.	999	0			
10101 GTR312 DISTILL	10.	1.09	0.319	0.25	11.0	0.81	0.35	0.72	3.88	0.	-0.17	5.60	0.937	2.	999	0			
10101 GTR316 DISTILL	10.	1.00	0.310	0.25	11.0	0.81	0.35	0.72	3.70	0.	0.	5.58	0.934	2.	999	0			
10101 GTR316 DISTILL	10.	1.07	0.316	0.25	11.3	0.83	0.35	0.73	3.86	0.	-0.14	5.64	0.944	2.	999	0			
10101 FCPADS DISTILL	10.	1.00	0.232	0.25	11.7	0.87	0.37	1.53	4.12	0.	0.	6.88	1.153	-3.	-60	0			
10101 FCPADS DISTILL	10.	2.42	0.279	0.25	19.6	1.45	0.62	3.02	7.76	0.	-2.63	10.22	1.712	-17.	0	59			
10101 FCMCDS DISTILL	10.	1.00	0.310	0.25	12.1	0.90	0.38	1.47	3.70	0.	0.	6.45	1.080	-1.	-62	0			
10101 FCMCDS DISTILL	10.	1.92	0.360	0.25	17.4	1.29	0.55	2.37	5.67	0.	-1.70	8.17	1.369	-9.	0	61			
10102 OMCCGN COAL-FG	30.	0.	0.	0.25	25.2	1.91	0.81	1.52	8.15	9.24	0.	21.64	1.000	0.	0	0			
10102 STM141 RESIDUA	30.	0.99	0.246	0.25	19.0	1.44	0.61	0.98	17.50	0.11	0.	20.64	0.954	6.	999	0			
10102 STM141 COAL-FG	30.	0.99	0.246	0.25	34.5	2.62	1.11	2.01	10.16	0.11	0.	16.02	0.740	13.	36	3			
10102 STM141 COAL-AF	30.	0.99	0.246	0.25	29.8	2.26	0.96	1.95	10.16	0.11	0.	15.44	0.714	17.	69	2			
10102 STM088 RESIDUA	30.	0.75	0.187	0.25	17.2	1.30	0.55	0.93	16.67	2.30	0.	21.75	1.005	4.	-6	0			
10102 STM088 COAL-FG	30.	0.75	0.187	0.25	32.1	2.44	1.04	1.89	9.68	2.30	0.	17.35	0.802	10.	37	3			
10102 STM068 COAL-AF	30.	0.75	0.187	0.25	23.4	1.77	0.75	1.75	9.68	2.30	0.	16.26	0.751	18.	999	0			
10102 PFBSTM COAL-PF	30.	1.00	0.245	0.25	42.4	3.22	1.37	3.12	10.24	0.	0.	17.94	0.829	3.	17	6			
10102 PFBSTM COAL-PF	30.	1.52	0.308	0.25	41.0	3.11	1.32	3.13	11.31	0.	-2.86	16.02	0.740	10.	24	4			
10102 TISTMT RESIDUA	30.	1.00	0.245	0.25	65.9	5.00	2.13	2.40	17.63	0.	0.	27.16	1.255	-37.	0	73			
10102 TISTMT RESIDUA	30.	1.99	0.349	0.25	101.7	7.72	3.28	3.11	21.18	0.	-5.48	29.82	1.378	-62.	0	96			
10102 TISTMT COAL	30.	1.00	0.245	0.25	91.4	6.94	2.95	3.78	10.24	0.	0.	23.91	1.105	-39.	2	22			
10102 TISTMT COAL	30.	1.99	0.349	0.25	128.5	9.75	4.14	4.45	12.30	0.	-5.48	25.16	1.163	-61.	2	22			
10102 TIHRSG RESIDUA	30.	0.85	0.171	0.25	84.9	6.29	2.67	2.52	17.92	1.42	0.	30.82	1.424	-56.	0	67			
10102 TIHRSG COAL	30.	0.85	0.171	0.25	108.6	8.24	3.50	3.72	10.41	1.42	0.	27.29	1.261	-58.	0	999			
10102 STIRL DISTILL	30.	1.00	0.180	0.25	28.9	2.14	0.91	1.43	23.45	0.	0.	27.93	1.291	-21.	0	56			
10102 STIRL DISTILL	30.	2.31	0.274	0.25	46.9	3.48	1.48	1.71	31.64	0.	-7.27	31.04	1.435	-39.	0	58			
10102 STIRL RESIDUA	30.	1.00	0.180	0.25	28.9	2.14	0.91	1.43	19.13	0.	0.	23.62	1.091	-8.	0	57			
10102 STIRL RESIDUA	30.	2.31	0.274	0.25	47.0	3.48	1.48	1.71	25.81	0.	-7.27	25.22	1.166	-21.	0	65			
10102 STIRL COAL	30.	1.00	0.180	0.25	54.2	4.02	1.71	2.85	11.11	0.	0.	19.69	0.910	-7.	10	9			
10102 STIRL COAL	30.	2.31	0.274	0.25	82.1	6.08	2.59	3.40	14.99	0.	-7.27	19.79	0.915	-21.	7	11			
10102 HEGT85 COAL-AF	30.	1.00	0.100	0.25	75.4	5.72	2.43	3.34	12.20	0.	0.	23.70	1.095	-31.	1	25			
10102 HEGT85 COAL-AF	30.	6.09	0.201	0.25	199.4	15.14	6.43	7.47	32.80	0.	-28.19	33.64	1.555	-121.	0	999			
10102 HEGT60 COAL-AF	30.	1.00	0.107	0.25	72.4	5.49	2.34	3.27	12.11	0.	0.	23.20	1.072	-28.	2	21			
10102 HEGT60 COAL-AF	30.	2.99	0.178	0.25	119.5	9.07	3.86	4.65	19.99	0.	-11.05	26.51	1.225	-61.	0	999			
10102 HEGT00 COAL-AF	30.	1.00	0.104	0.25	67.1	5.09	2.17	3.13	12.14	0.	0.	22.53	1.041	-23.	3	17			
10102 HEGT00 COAL-AF	30.	1.40	0.126	0.25	72.5	5.50	2.34	3.05	13.72	0.	-2.20	22.42	1.036	-25.	3	16			
10102 FCMCCL COAL	30.	1.00	0.213	0.25	64.3	5.00	2.13	3.52	10.66	0.	0.	21.31	0.985	-19.	5	13			
10102 FCMCCL COAL	30.	2.56	0.337	0.25	88.8	6.91	2.94	4.87	14.59	0.	-8.67	20.63	0.954	-29.	6	12			
10102 FCSTCL COAL	30.	1.00	0.222	0.25	62.3	4.84	2.06	3.43	10.55	0.	0.	20.88	0.965	-16.	6	12			
10102 FCSTCL COAL	30.	4.17	0.409	0.25	111.0	8.63	3.67	6.12	18.15	0.	-17.56	19.01	0.879	-35.	7	11			
10102 IGGTST COAL	30.	1.00	0.179	0.25	60.0	4.66	1.98	2.85	11.13	0.	0.	20.63	0.953	-14.	7	11			
10102 IGGTST COAL	30.	2.94	0.296	0.25	87.3	6.79	2.89	3.06	16.92	0.	-10.75	18.90	0.874	-22.	8	10			
10102 GTSOAR RESIDUA	30.	1.00	0.188	0.25	22.9	1.69	0.72	1.21	18.96	0.	0.	22.59	1.044	-2.	-23	0			
10102 GTSOAR RESIDUA	30.	2.62	0.299	0.25	33.8	2.51	1.07	1.30	26.96	0.	-9.00	22.83	1.055	-7.	0	65			
10102 GTACOB RESIDUA	30.	1.00	0.211	0.25	21.0	1.56	0.66	1.16	18.43	0.	0.	21.81	1.008	2.	-7	0			

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SENSITIVITY OF CAPITAL COST						PERCENT OF ORIGINAL COST 100										*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****		
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	CANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS			
SYSTEM	FUEL	REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC							WORTH 15%	%	PAY BACK			
10102 GTAC08 RESIDUA	30.	2.11	0.308	0.25	25.3	1.88	0.80	1.07	23.32	0.	-6.17	20.89	0.965	3.	999	0		
10102 GTAC12 RESIDUA	30.	1.00	0.211	0.25	21.7	1.61	0.68	1.18	18.43	0.	0.	21.89	1.012	1.	-9	0		
10102 GTAC12 RESIDUA	30.	2.61	0.335	0.25	30.1	2.23	0.95	1.20	25.49	0.	-8.93	20.95	0.968	0.	15	6		
10102 GTAC16 RESIDUA	30.	1.00	0.209	0.25	23.8	1.76	0.75	1.23	18.47	0.	0.	22.22	1.027	-1.	-21	0		
10102 GTAC16 RESIDUA	30.	2.93	0.346	0.25	34.2	2.54	1.08	1.31	27.05	0.	-10.71	21.26	0.983	-3.	8	10		
10102 GTWC16 RESIDUA	30.	1.00	0.186	0.25	23.7	1.75	0.74	1.23	19.00	0.	0.	22.73	1.051	-2.	-32	0		
10102 GTWC16 RESIDUA	30.	3.12	0.315	0.25	33.0	2.45	1.04	1.30	29.54	0.	-11.77	22.56	1.042	-6.	0	69		
10102 CC1626 RESIDUA	30.	1.00	0.186	0.25	27.1	2.06	0.88	1.43	19.01	0.	0.	23.37	1.080	-6.	0	56		
10102 CC1626 RESIDUA	30.	5.22	0.362	0.25	48.3	3.66	1.56	1.89	39.96	0.	-23.37	23.69	1.095	-17.	0	223		
10102 CC1622 RESIDUA	30.	1.00	0.195	0.25	27.1	2.06	0.87	1.42	18.80	0.	0.	23.15	1.070	-6.	0	56		
10102 CC1622 RESIDUA	30.	4.70	0.370	0.25	49.1	3.73	1.58	1.86	36.41	0.	-20.51	23.07	1.066	-16.	0	999		
10102 CC1222 RESIDUA	30.	1.00	0.197	0.25	26.5	2.01	0.85	1.41	18.76	0.	0.	23.03	1.064	-5.	0	56		
10102 CC1222 RESIDUA	30.	4.68	0.373	0.25	46.3	3.52	1.49	1.82	36.14	0.	-20.42	22.54	1.042	-13.	0	26		
10102 CC0822 RESIDUA	30.	1.00	0.211	0.25	26.2	1.99	0.84	1.40	18.43	0.	0.	22.66	1.047	-4.	0	56		
10102 CC0822 RESIDUA	30.	3.75	0.377	0.25	36.3	2.75	1.17	1.53	30.54	0.	-15.27	20.72	0.958	-2.	11	8		
10102 STIG15 RESIDUA	30.	1.00	0.069	0.25	27.5	2.04	0.87	1.59	21.74	0.	0.	26.24	1.213	-15.	0	56		
10102 STIG15 RESIDUA	30.	117.39	0.171	0.25	861.5	63.81	27.13	51.42	917.88	0.	-645.14	415.10	19.184	-1628.	0	58		
10102 STIG10 RESIDUA	30.	1.00	0.099	0.25	26.5	1.96	0.83	1.49	21.04	0.	0.	25.32	1.170	-12.	0	56		
10102 STIG10 RESIDUA	30.	10.86	0.218	0.25	94.6	7.01	2.98	4.83	90.06	0.	-54.63	50.24	2.322	-122.	0	58		
10102 STIG1S RESIDUA	30.	1.00	0.112	0.25	26.0	1.92	0.82	1.48	20.72	0.	0.	24.95	1.153	-10.	0	56		
10102 STIG1S RESIDUA	30.	6.37	0.228	0.25	55.2	4.09	1.74	3.08	56.61	0.	-29.76	35.76	1.652	-58.	0	58		
10102 DEADV3 RESIDUA	30.	1.00	0.149	0.25	35.9	2.66	1.13	1.60	19.87	0.	0.	25.26	1.167	-16.	0	59		
10102 DEADV3 RESIDUA	30.	6.38	0.302	0.25	125.1	9.26	3.94	3.82	51.23	0.	-29.82	38.43	1.776	-99.	0	66		
10102 DEHTPH RESIDUA	30.	1.00	0.220	0.25	32.8	2.43	1.03	1.57	18.21	0.	0.	23.24	1.074	-8.	0	61		
10102 DEHTPH RESIDUA	30.	3.24	0.377	0.25	69.4	5.14	2.19	2.38	27.55	0.	-12.41	24.85	1.148	-30.	0	999		
10102 DESQA3 DISTILL	30.	1.00	0.128	0.25	40.8	3.02	1.28	1.73	24.96	0.	0.	31.00	1.432	-36.	0	57		
10102 DESQA3 DISTILL	30.	7.27	0.266	0.25	176.2	13.05	5.55	5.14	73.54	0.	-34.75	62.53	2.890	-198.	0	60		
10102 DESQA3 RESIDUA	30.	1.00	0.128	0.25	40.8	3.02	1.28	1.73	20.36	0.	0.	26.40	1.220	-22.	0	59		
10102 DESQA3 RESIDUA	30.	7.27	0.266	0.25	176.2	13.05	5.55	5.14	59.99	0.	-34.75	48.98	2.264	-156.	0	65		
10102 GTSQAD DISTILL	30.	1.00	0.203	0.25	20.4	1.51	0.64	1.15	22.82	0.	0.	26.12	1.207	-11.	-47	0		
10102 GTSQAD DISTILL	30.	2.50	0.317	0.25	26.3	1.95	0.83	1.10	31.23	0.	-8.30	26.81	1.239	-16.	0	55		
10102 GTRA08 DISTILL	30.	1.00	0.193	0.25	28.0	2.08	0.88	1.34	23.09	0.	0.	27.39	1.266	-19.	0	56		
10102 GTRA08 DISTILL	30.	3.96	0.351	0.25	45.0	3.33	1.42	1.62	40.47	0.	-16.39	30.45	1.407	-37.	0	58		
10102 GTRA12 DISTILL	30.	1.00	0.196	0.25	28.3	2.09	0.89	1.35	23.00	0.	0.	27.33	1.263	-19.	0	56		
10102 GTRA12 DISTILL	30.	3.90	0.355	0.25	45.7	3.39	1.44	1.63	39.79	0.	-16.08	30.17	1.394	-36.	0	58		
10102 GTRA16 DISTILL	30.	1.00	0.197	0.25	26.1	1.93	0.82	1.29	22.98	0.	0.	27.02	1.249	-17.	0	55		
10102 GTRA16 DISTILL	30.	3.67	0.350	0.25	46.1	3.42	1.45	1.64	38.37	0.	-14.78	30.09	1.391	-36.	0	58		
10102 GTR208 DISTILL	30.	1.00	0.196	0.25	24.0	1.78	0.76	1.24	23.01	0.	0.	26.79	1.238	-15.	135	0		
10102 GTR208 DISTILL	30.	3.07	0.329	0.25	36.8	2.72	1.16	1.39	35.03	0.	-11.47	28.82	1.332	-28.	0	57		
10102 GTR212 DISTILL	30.	1.00	0.195	0.25	24.6	1.82	0.77	1.26	23.05	0.	0.	26.90	1.243	-16.	193	0		
10102 GTR212 DISTILL	30.	3.29	0.335	0.25	39.5	2.93	1.24	1.46	36.46	0.	-12.72	29.37	1.357	-31.	0	57		
10102 GTR216 DISTILL	30.	1.00	0.198	0.25	25.3	1.87	0.80	1.27	22.94	0.	0.	26.88	1.242	-16.	999	0		
10102 GTR216 DISTILL	30.	3.37	0.344	0.25	42.2	3.13	1.33	1.53	36.54	0.	-13.15	29.37	1.358	-32.	0	58		
10102 GTRW08 DISTILL	30.	1.00	0.162	0.25	27.9	2.07	0.88	1.35	23.99	0.	0.	28.28	1.307	-22.	0	56		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/	HEAT COST	INSNC			ELEC				WORTH	%	PAY					
		MW	REQD	RATIO *10**6								15%		BACK					
10102 GTRW08 DISTILL	30.	4.75	0.308	0.25	47.1	3.49	1.48	1.70	49.41	0.	-20.78	35.30	1.632	-53.	0	57			
10102 GTRW12 DISTILL	30.	1.60	0.172	0.25	27.9	2.07	0.88	1.34	23.71	0.	0.	28.00	1.294	-21.	0	56			
10102 GTRW12 DISTILL	30.	4.87	0.329	0.25	47.7	3.53	1.50	1.72	48.89	0.	-21.47	34.18	1.579	-49.	0	57			
10102 GTRW16 DISTILL	30.	1.00	0.173	0.25	28.5	2.11	0.90	1.36	23.66	0.	0.	28.02	1.295	-21.	0	56			
10102 GTRW16 DISTILL	30.	4.56	0.327	0.25	47.5	3.51	1.49	1.70	46.60	0.	-19.71	33.60	1.553	-48.	0	57			
10102 GTR308 DISTILL	30.	1.00	0.154	0.25	24.0	1.78	0.76	1.25	24.23	0.	0.	28.02	1.295	-19.	166	0			
10102 GTR308 DISTILL	30.	3.61	0.272	0.25	36.9	2.74	1.16	1.42	42.57	0.	-14.49	33.40	1.544	-42.	0	56			
10102 GTR312 DISTILL	30.	1.00	0.175	0.25	27.0	2.00	0.85	1.32	23.61	0.	0.	27.79	1.284	-20.	0	56			
10102 GTR312 DISTILL	30.	4.03	0.319	0.25	41.1	3.04	1.29	1.53	42.99	0.	-16.77	32.09	1.483	-40.	0	57			
10102 GTR316 DISTILL	30.	1.00	0.174	0.25	27.7	2.05	0.87	1.34	23.64	0.	0.	27.90	1.289	-20.	0	56			
10102 GTR316 DISTILL	30.	3.97	0.316	0.25	42.3	3.13	1.33	1.56	42.73	0.	-16.44	32.31	1.493	-41.	0	57			
10102 FCPADS DISTILL	30.	1.00	0.130	0.25	34.1	2.53	1.07	4.02	24.90	0.	0.	32.52	1.503	-38.	0	57			
10102 FCPADS DISTILL	30.	8.95	0.279	0.25	154.0	11.41	4.85	28.02	86.04	0.	-44.08	86.23	3.985	-266.	0	59			
10102 FCMCDS DISTILL	30.	1.00	0.174	0.25	35.3	2.62	1.11	3.84	23.64	0.	0.	31.21	1.442	-35.	0	57			
10102 FCMCDS DISTILL	30.	7.08	0.360	0.25	132.4	9.80	4.17	21.00	62.78	0.	-33.72	64.04	2.959	-185.	0	60			
20111 ONCGCN RESIDUA	2.	0.	0.	0.28	1.6	0.12	0.05	0.19	0.22	0.16	0.	0.73	1.000	0.	0	0			
20111 STM141 RESIDUA	2.	1.00	0.264	0.28	3.2	0.24	0.10	0.36	0.28	0.	0.	0.98	1.342	-2.	0	77			
20111 STM141 RESIDUA	2.	1.09	0.277	0.28	3.0	0.23	0.10	0.29	0.28	0.	-0.01	0.89	1.226	-1.	0	114			
20111 STM141 COAL-FG	2.	1.00	0.264	0.28	5.6	0.43	0.18	0.57	0.16	0.	0.	1.34	1.842	-4.	0	77			
20111 STM141 COAL-FG	2.	1.09	0.277	0.28	5.2	0.39	0.17	0.46	0.16	0.	-0.01	1.17	1.614	-3.	0	92			
20111 STM141 COAL-AF	2.	1.00	0.264	0.28	5.1	0.39	0.17	0.51	0.16	0.	0.	1.22	1.683	-3.	0	82			
20111 STM141 COAL-AF	2.	1.09	0.277	0.28	4.6	0.35	0.15	0.40	0.16	0.	-0.01	1.05	1.441	-2.	0	141			
20111 STM088 RESIDUA	2.	0.86	0.227	0.28	2.6	0.20	0.08	0.28	0.27	0.02	0.	0.85	1.166	-1.	0	114			
20111 STM088 COAL-FG	2.	0.86	0.227	0.28	4.7	0.36	0.15	0.44	0.15	0.02	0.	1.13	1.553	-3.	0	89			
20111 STM088 COAL-AF	2.	0.86	0.227	0.28	4.3	0.33	0.14	0.38	0.15	0.02	0.	1.03	1.411	-2.	0	125			
20111 PFBSTM COAL-PF	2.	1.00	0.261	0.28	7.1	0.54	0.23	0.61	0.16	0.	0.	1.54	2.114	-5.	0	76			
20111 PFBSTM COAL-PF	2.	1.58	0.332	0.28	6.8	0.52	0.22	0.47	0.18	0.	-0.05	1.34	1.840	-4.	0	95			
20111 TISTMT RESIDUA	2.	1.00	0.260	0.28	8.7	0.66	0.28	0.53	0.28	0.	0.	1.74	2.392	-7.	0	74			
20111 TISTMT RESIDUA	2.	2.03	0.368	0.28	13.0	0.99	0.42	0.56	0.34	0.	-0.10	2.21	3.034	-10.	0	78			
20111 TISTMT COAL	2.	1.00	0.260	0.28	12.2	0.93	0.39	0.79	0.16	0.	0.	2.27	3.115	-10.	0	74			
20111 TISTMT COAL	2.	2.03	0.368	0.28	16.5	1.26	0.53	0.77	0.20	0.	-0.10	2.65	3.648	-13.	0	79			
20111 TIHRSG RESIDUA	2.	0.75	0.172	0.28	10.2	0.76	0.32	0.40	0.27	0.04	0.	1.79	2.455	-7.	0	78			
20111 TIHRSG COAL	2.	0.75	0.172	0.28	13.2	1.00	0.43	0.57	0.16	0.04	0.	2.20	3.019	-10.	0	79			
20111 STIRL DISTILL	2.	1.00	0.214	0.28	2.7	0.20	0.08	0.34	0.36	0.	0.	0.98	1.345	-1.	0	65			
20111 STIRL DISTILL	2.	2.42	0.323	0.28	3.3	0.24	0.10	0.28	0.50	0.	-0.13	0.98	1.354	-2.	0	71			
20111 STIRL RESIDUA	2.	1.00	0.214	0.28	2.7	0.20	0.08	0.34	0.29	0.	0.	0.91	1.254	-1.	0	74			
20111 STIRL RESIDUA	2.	2.42	0.323	0.28	3.3	0.24	0.10	0.28	0.40	0.	-0.13	0.89	1.229	-1.	0	154			
20111 STIRL COAL	2.	1.00	0.214	0.28	5.7	0.42	0.18	0.57	0.17	0.	0.	1.34	1.847	-4.	0	76			
20111 STIRL COAL	2.	2.42	0.323	0.28	5.8	0.43	0.18	0.45	0.24	0.	-0.13	1.17	1.606	-3.	0	128			
20111 HEGT85 COAL-AF	2.	1.00	0.188	0.28	10.8	0.82	0.35	0.62	0.18	0.	0.	1.97	2.706	-8.	0	77			
20111 HEGT85 COAL-AF	2.	3.10	0.308	0.28	17.8	1.35	0.57	0.65	0.28	0.	-0.20	2.66	3.660	-14.	0	83			
20111 HEGT60 COAL-AF	2.	1.00	0.134	0.28	10.6	0.81	0.34	0.62	0.19	0.	0.	1.96	2.690	-8.	0	77			
20111 HEGT60 COAL-AF	2.	2.47	0.204	0.28	15.2	1.15	0.49	0.59	0.28	0.	-0.14	2.37	3.257	-12.	0	82			
20111 HEGT00 COAL-AF	2.	1.00	0.123	0.28	9.5	0.72	0.31	0.55	0.19	0.	0.	1.77	2.431	-7.	0	79			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK									
20111 HEGT00	COAL-AF	2.	1.23	0.138	0.28	9.6	0.73	0.31	0.42	0.21	0.	-0.02	1.64	2.259	-7.	0	89		
20111 FCMCCL	COAL	2.	1.00	0.227	0.28	9.3	0.72	0.31	0.61	0.17	0.	0.	1.81	2.487	-7.	0	78		
20111 FCMCCL	COAL	2.	2.32	0.338	0.28	11.7	0.91	0.39	0.54	0.22	0.	-0.12	1.94	2.663	-9.	0	88		
20111 FCSTCL	COAL	2.	1.00	0.236	0.28	9.1	0.70	0.30	0.67	0.17	0.	0.	1.83	2.521	-7.	0	75		
20111 FCSTCL	COAL	2.	4.09	0.419	0.28	15.2	1.18	0.50	0.73	0.29	0.	-0.29	2.41	3.318	-12.	0	85		
20111 IGGTST	COAL	2.	1.00	0.193	0.28	9.5	0.74	0.31	0.73	0.18	0.	0.	1.96	2.689	-8.	0	74		
20111 IGGTST	COAL	2.	2.93	0.312	0.28	13.2	1.03	0.44	0.71	0.27	0.	-0.18	2.26	3.112	-11.	0	80		
20111 GTSOAR	RESIDUA	2.	1.00	0.206	0.28	3.3	0.25	0.11	0.33	0.30	0.	0.	0.98	1.347	-2.	0	77		
20111 GTSOAR	RESIDUA	2.	2.31	0.306	0.28	4.0	0.30	0.13	0.26	0.40	0.	-0.12	0.97	1.328	-2.	0	123		
20111 GTAC08	RESIDUA	2.	1.00	0.222	0.28	2.9	0.22	0.09	0.32	0.29	0.	0.	0.92	1.263	-1.	0	81		
20111 GTAC08	RESIDUA	2.	1.92	0.307	0.28	3.1	0.23	0.10	0.23	0.36	0.	-0.09	0.84	1.154	-1.	0	999		
20111 GTAC12	RESIDUA	2.	1.00	0.226	0.28	3.0	0.22	0.09	0.32	0.29	0.	0.	0.92	1.264	-1.	0	81		
20111 GTAC12	RESIDUA	2.	2.34	0.337	0.28	3.5	0.26	0.11	0.25	0.39	0.	-0.13	0.87	1.200	-1.	0	999		
20111 GTAC16	RESIDUA	2.	1.00	0.225	0.28	3.0	0.23	0.10	0.32	0.29	0.	0.	0.93	1.282	-1.	0	80		
20111 GTAC16	RESIDUA	2.	2.61	0.350	0.28	3.8	0.28	0.12	0.26	0.41	0.	-0.15	0.92	1.265	-2.	0	955		
20111 GTWC16	RESIDUA	2.	1.00	0.197	0.28	3.3	0.24	0.10	0.33	0.30	0.	0.	0.98	1.342	-2.	0	76		
20111 GTWC16	RESIDUA	2.	2.83	0.315	0.28	4.3	0.32	0.14	0.28	0.45	0.	-0.17	1.02	1.395	-2.	0	101		
20111 CC1626	RESIDUA	2.	1.00	0.199	0.28	3.4	0.26	0.11	0.40	0.30	0.	0.	1.07	1.465	-2.	0	70		
20111 CC1626	RESIDUA	2.	5.08	0.371	0.28	6.3	0.48	0.20	0.44	0.64	0.	-0.38	1.38	1.893	-4.	0	77		
20111 CC1622	RESIDUA	2.	1.00	0.209	0.28	3.2	0.24	0.10	0.39	0.30	0.	0.	1.04	1.425	-2.	0	71		
20111 CC1622	RESIDUA	2.	4.59	0.380	0.28	5.6	0.43	0.18	0.41	0.58	0.	-0.34	1.27	1.744	-4.	0	80		
20111 CC1222	RESIDUA	2.	1.00	0.210	0.28	3.1	0.24	0.10	0.39	0.30	0.	0.	1.03	1.409	-2.	0	70		
20111 CC1222	RESIDUA	2.	4.58	0.383	0.28	5.4	0.41	0.17	0.41	0.58	0.	-0.34	1.23	1.696	-3.	0	81		
20111 CC0822	RESIDUA	2.	1.00	0.225	0.28	3.3	0.25	0.11	0.39	0.29	0.	0.	1.04	1.423	-2.	0	71		
20111 CC0822	RESIDUA	2.	3.70	0.389	0.28	4.9	0.37	0.16	0.38	0.49	0.	-0.25	1.15	1.577	-3.	0	86		
20111 STIG15	RESIDUA	2.	1.00	0.073	0.28	3.5	0.26	0.11	0.35	0.35	0.	0.	1.06	1.464	-2.	0	69		
20111 STIG15	RESIDUA	2.	106.26	0.171	0.28	65.0	4.81	2.05	2.64	14.10	0.	-9.90	13.70	18.829	-70.	0	63		
20111 STIG10	RESIDUA	2.	1.00	0.105	0.28	3.3	0.25	0.10	0.34	0.33	0.	0.	1.03	1.412	-2.	0	70		
20111 STIG10	RESIDUA	2.	9.83	0.218	0.28	8.9	0.66	0.28	0.50	1.38	0.	-0.83	2.00	2.746	-7.	0	66		
20111 STIG15	RESIDUA	2.	1.00	0.119	0.28	3.2	0.24	0.10	0.34	0.33	0.	0.	1.01	1.391	-2.	0	70		
20111 STIG15	RESIDUA	2.	5.77	0.228	0.28	5.1	0.46	0.19	0.39	0.87	0.	-0.45	1.46	2.001	-4.	0	69		
20111 DEADV3	RESIDUA	2.	1.00	0.201	0.28	4.4	0.33	0.14	0.38	0.30	0.	0.	1.14	1.573	-3.	0	74		
20111 DEADV3	RESIDUA	2.	4.04	0.355	0.28	7.1	0.52	0.22	0.40	0.55	0.	-0.29	1.41	1.935	-5.	0	80		
20111 DEHTPM	RESIDUA	2.	1.00	0.244	0.28	4.3	0.32	0.14	0.40	0.28	0.	0.	1.14	1.563	-3.	0	74		
20111 DEHTPM	RESIDUA	2.	3.01	0.397	0.28	6.0	0.44	0.19	0.38	0.42	0.	-0.19	1.24	1.704	-4.	0	88		
20111 DESO3	DISTILL	2.	1.00	0.188	0.28	3.3	0.25	0.10	0.35	0.37	0.	0.	1.08	1.478	-2.	0	66		
20111 DESO3	DISTILL	2.	4.13	0.334	0.28	7.2	0.53	0.23	0.40	0.71	0.	-0.29	1.57	2.159	-5.	0	70		
20111 DESO3	RESIDUA	2.	1.00	0.188	0.28	3.3	0.25	0.10	0.35	0.30	0.	0.	1.01	1.384	-2.	0	73		
20111 DESO3	RESIDUA	2.	4.13	0.334	0.28	7.2	0.53	0.23	0.40	0.58	0.	-0.29	1.44	1.980	-5.	0	78		
20111 GTSO3	DISTILL	2.	1.00	0.219	0.28	2.9	0.21	0.09	0.32	0.36	0.	0.	0.98	1.342	-1.	0	67		
20111 GTSO3	DISTILL	2.	2.22	0.321	0.28	3.2	0.24	0.10	0.24	0.47	0.	-0.12	0.93	1.280	-1.	0	77		
20111 GTRA08	DISTILL	2.	1.00	0.212	0.28	3.5	0.26	0.11	0.33	0.36	0.	0.	1.07	1.467	-2.	0	68		
20111 GTRA08	DISTILL	2.	3.44	0.358	0.28	5.2	0.39	0.16	0.30	0.60	0.	-0.23	1.22	1.682	-3.	0	73		
20111 GTRA12	DISTILL	2.	1.00	0.214	0.28	3.4	0.25	0.11	0.33	0.36	0.	0.	1.05	1.448	-2.	0	68		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100													
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																							
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	POWER FESRPOWER CAPITAL CAPITAL TAXES	PURCHD REVNUE TOTAL	NORML	PRESNT	ROI	GROSS									
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK													
20111	GTRA12	DISTILL	2.	3.41	0.362	0.28	5.1	0.38	0.16	0.30	0.59	0.	-0.23	1.21	1.660	-3.	0	74					
20111	GTRA16	DISTILL	2.	1.00	0.215	0.28	3.5	0.26	0.11	0.33	0.36	0.	0.	1.07	1.468	-2.	0	68					
20111	GTRA16	DISTILL	2.	3.22	0.356	0.28	5.2	0.39	0.16	0.30	0.57	0.	-0.21	1.22	1.673	-3.	0	74					
20111	GTR208	DISTILL	2.	1.00	0.213	0.28	3.3	0.24	0.10	0.33	0.36	0.	0.	1.03	1.422	-2.	0	68					
20111	GTR208	DISTILL	2.	2.71	0.335	0.28	4.2	0.31	0.13	0.27	0.52	0.	-0.16	1.08	1.484	-2.	0	74					
20111	GTR212	DISTILL	2.	1.00	0.211	0.28	3.4	0.25	0.11	0.33	0.36	0.	0.	1.05	1.438	-2.	0	68					
20111	GTR212	DISTILL	2.	2.91	0.340	0.28	4.5	0.34	0.14	0.28	0.55	0.	-0.18	1.13	1.550	-3.	0	74					
20111	GTR216	DISTILL	2.	1.00	0.215	0.28	3.4	0.25	0.11	0.33	0.36	0.	0.	1.05	1.441	-2.	0	68					
20111	GTR216	DISTILL	2.	2.98	0.349	0.28	4.7	0.35	0.15	0.29	0.55	0.	-0.19	1.15	1.575	-3.	0	74					
20111	GTRW08	DISTILL	2.	1.00	0.177	0.28	3.6	0.27	0.11	0.34	0.38	0.	0.	1.10	1.508	-2.	0	67					
20111	GTRW08	DISTILL	2.	4.14	0.314	0.28	5.9	0.44	0.19	0.34	0.73	0.	-0.30	1.40	1.919	-4.	0	69					
20111	GTRW12	DISTILL	2.	1.00	0.186	0.28	3.6	0.27	0.11	0.34	0.37	0.	0.	1.09	1.500	-2.	0	67					
20111	GTRW12	DISTILL	2.	4.27	0.334	0.28	6.0	0.45	0.19	0.34	0.73	0.	-0.31	1.39	1.913	-4.	0	70					
20111	GTRW16	DISTILL	2.	1.00	0.188	0.28	3.7	0.27	0.12	0.34	0.37	0.	0.	1.10	1.515	-2.	0	68					
20111	GTRW16	DISTILL	2.	4.01	0.331	0.28	6.0	0.45	0.19	0.34	0.70	0.	-0.28	1.39	1.905	-4.	0	70					
20111	GTR308	DISTILL	2.	1.00	0.172	0.28	3.3	0.25	0.10	0.33	0.38	0.	0.	1.07	1.464	-2.	0	66					
20111	GTR308	DISTILL	2.	3.11	0.282	0.28	4.6	0.34	0.15	0.29	0.62	0.	-0.20	1.21	1.658	-3.	0	68					
20111	GTR312	DISTILL	2.	1.00	0.189	0.28	3.4	0.25	0.11	0.33	0.37	0.	0.	1.07	1.469	-2.	0	67					
20111	GTR312	DISTILL	2.	3.57	0.323	0.28	5.1	0.38	0.16	0.31	0.65	0.	-0.24	1.25	1.720	-3.	0	70					
20111	GTR316	DISTILL	2.	1.00	0.188	0.28	3.5	0.26	0.11	0.34	0.37	0.	0.	1.08	1.490	-2.	0	67					
20111	GTR316	DISTILL	2.	3.52	0.320	0.28	5.3	0.39	0.17	0.31	0.64	0.	-0.24	1.28	1.759	-3.	0	70					
20111	FCPADS	DISTILL	2.	1.00	0.190	0.28	3.0	0.22	0.09	0.32	0.37	0.	0.	1.00	1.379	-2.	0	67					
20111	FCPADS	DISTILL	2.	4.67	0.348	0.28	6.0	0.44	0.19	0.46	0.76	0.	-0.35	1.50	2.064	-5.	0	67					
20111	FCMCDS	DISTILL	2.	1.00	0.184	0.28	3.2	0.24	0.10	0.32	0.37	0.	0.	1.03	1.411	-2.	0	67					
20111	FCMCDS	DISTILL	2.	6.41	0.360	0.28	8.8	0.65	0.28	0.59	0.96	0.	-0.51	1.97	2.711	-7.	0	67					
20261	ONCCGN	RESIDUA	1.	0.	0.	0.41	1.0	0.07	0.03	0.14	0.10	0.11	0.	0.45	1.000	0.	0	0					
20261	STM141	RESIDUA	1.	0.74	0.239	0.41	1.9	0.14	0.06	0.22	0.13	0.03	0.	0.58	1.295	-1.	0	80					
20261	STM141	COAL-FG	1.	0.74	0.239	0.41	3.0	0.23	0.10	0.34	0.07	0.03	0.	0.77	1.719	-2.	0	76					
20261	STM141	COAL-AF	1.	0.74	0.239	0.41	2.9	0.22	0.09	0.29	0.07	0.03	0.	0.71	1.589	-2.	0	83					
20261	STM088	RESIDUA	1.	0.58	0.189	0.41	1.6	0.12	0.05	0.21	0.12	0.04	0.	0.55	1.224	-1.	0	76					
20261	STM088	COAL-FG	1.	0.58	0.189	0.41	2.8	0.21	0.09	0.33	0.07	0.04	0.	0.74	1.653	-2.	0	74					
20261	STM088	COAL-AF	1.	0.58	0.189	0.41	2.7	0.21	0.09	0.28	0.07	0.04	0.	0.69	1.551	-2.	0	81					
20261	PFDSTM	COAL-PF	1.	1.00	0.321	0.41	4.4	0.34	0.14	0.42	0.08	0.	0.	0.98	2.190	-3.	0	74					
20261	PFDSTM	COAL-PF	1.	1.07	0.332	0.41	4.2	0.32	0.14	0.34	0.08	0.	-0.00	0.87	1.952	-3.	0	82					
20261	TISTMT	RESIDUA	1.	1.00	0.319	0.41	6.2	0.47	0.20	0.40	0.14	0.	0.	1.21	2.718	-5.	0	73					
20261	TISTMT	RESIDUA	1.	1.38	0.368	0.41	7.4	0.56	0.24	0.37	0.16	0.	-0.02	1.30	2.908	-6.	0	76					
20261	TISTMT	COAL	1.	1.00	0.319	0.41	8.4	0.64	0.27	0.59	0.08	0.	0.	1.57	3.523	-7.	0	73					
20261	TISTMT	COAL	1.	1.38	0.368	0.41	9.4	0.71	0.30	0.51	0.09	0.	-0.02	1.59	3.564	-8.	0	76					
20261	TIHRSG	RESIDUA	1.	0.51	0.143	0.41	5.8	0.43	0.18	0.25	0.12	0.05	0.	1.04	2.326	-4.	0	78					
20261	TIHRSG	COAL	1.	0.51	0.143	0.41	7.5	0.57	0.24	0.37	0.07	0.05	0.	1.30	2.914	-6.	0	77					
20261	STIRL	DISTILL	1.	1.00	0.268	0.41	1.6	0.12	0.05	0.25	0.18	0.	0.	0.60	1.352	-1.	0	66					
20261	STIRL	DISTILL	1.	1.68	0.332	0.41	1.6	0.12	0.05	0.19	0.23	0.	-0.04	0.54	1.208	-1.	0	75					
20261	STIRL	RESIDUA	1.	1.00	0.268	0.41	1.6	0.12	0.05	0.25	0.15	0.	0.	0.57	1.276	-1.	0	72					
20261	STIRL	RESIDUA	1.	1.68	0.332	0.41	1.6	0.12	0.05	0.19	0.19	0.	-0.04	0.50	1.115	-0.	0	999					

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	ANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST											WORTH	%	PAY	
		MW	REQD	RATIO	*10**6	INSNC		ELEC								15%		BACK	
20261 STIRL	COAL	1.	1.00	0.268	0.41	3.5	0.26	0.11	0.42	0.09	0.	0.	0.87	1.951	-3.	0	72		
20261 STIRL	COAL	1.	1.68	0.332	0.41	3.2	0.23	0.10	0.31	0.11	0.	-0.04	0.71	1.578	-2.	0	97		
20261 HEGT85	COAL-AF	1.	1.00	0.247	0.41	7.5	0.57	0.24	0.45	0.09	0.	0.	1.35	3.022	-6.	0	75		
20261 HEGT85	COAL-AF	1.	1.96	0.323	0.41	9.8	0.74	0.32	0.39	0.12	0.	-0.06	1.51	3.379	-8.	0	82		
20261 HEGT60	COAL-AF	1.	1.00	0.164	0.41	7.3	0.56	0.24	0.45	0.10	0.	0.	1.34	3.007	-6.	0	75		
20261 HEGT60	COAL-AF	1.	1.68	0.204	0.41	8.8	0.67	0.28	0.37	0.13	0.	-0.04	1.41	3.149	-7.	0	81		
20261 HEGT00	COAL-AF	1.	0.84	0.126	0.41	5.5	0.42	0.18	0.27	0.09	0.02	0.	0.99	2.204	-4.	0	85		
20261 FCMCCL	COAL	1.	1.00	0.278	0.41	6.2	0.48	0.21	0.44	0.09	0.	0.	1.22	2.720	-5.	0	75		
20261 FCMCCL	COAL	1.	1.57	0.338	0.41	6.8	0.53	0.23	0.35	0.10	0.	-0.04	1.17	2.616	-5.	0	84		
20261 FCSTCL	COAL	1.	1.00	0.290	0.41	6.1	0.48	0.20	0.51	0.08	0.	0.	1.27	2.844	-5.	0	73		
20261 FCSTCL	COAL	1.	2.78	0.419	0.41	8.8	0.69	0.29	0.48	0.13	0.	-0.11	1.48	3.315	-7.	0	80		
20261 IGGTST	COAL	1.	1.00	0.237	0.41	6.6	0.51	0.22	0.56	0.09	0.	0.	1.38	3.090	-6.	0	71		
20261 IGGTST	COAL	1.	1.99	0.312	0.41	8.0	0.62	0.26	0.50	0.12	0.	-0.06	1.44	3.230	-7.	0	76		
20261 GTS0AR	RESIDUA	1.	1.00	0.253	0.41	2.2	0.16	0.07	0.24	0.15	0.	0.	0.63	1.417	-1.	0	75		
20261 GTS0AR	RESIDUA	1.	1.57	0.306	0.41	2.3	0.17	0.07	0.18	0.18	0.	-0.04	0.58	1.294	-1.	0	144		
20261 GTAC08	RESIDUA	1.	1.00	0.272	0.41	1.9	0.14	0.06	0.23	0.15	0.	0.	0.57	1.286	-1.	0	80		
20261 GTAC08	RESIDUA	1.	1.31	0.307	0.41	1.8	0.13	0.06	0.16	0.17	0.	-0.02	0.50	1.119	-1.	0	999		
20261 GTAC12	RESIDUA	1.	1.00	0.277	0.41	1.9	0.14	0.06	0.24	0.15	0.	0.	0.59	1.309	-1.	0	78		
20261 GTAC12	RESIDUA	1.	1.59	0.337	0.41	2.0	0.15	0.06	0.17	0.18	0.	-0.04	0.52	1.157	-1.	0	999		
20261 GTAC16	RESIDUA	1.	1.00	0.276	0.41	2.0	0.15	0.06	0.24	0.15	0.	0.	0.60	1.337	-1.	0	77		
20261 GTAC16	RESIDUA	1.	1.77	0.350	0.41	2.2	0.16	0.07	0.18	0.19	0.	-0.05	0.54	1.216	-1.	0	999		
20261 GTWC16	RESIDUA	1.	1.00	0.242	0.41	2.2	0.16	0.07	0.25	0.16	0.	0.	0.64	1.422	-1.	0	74		
20261 GTWC16	RESIDUA	1.	1.92	0.315	0.41	2.5	0.19	0.08	0.19	0.21	0.	-0.06	0.61	1.354	-1.	0	107		
20261 CC1626	RESIDUA	1.	1.00	0.245	0.41	2.3	0.18	0.08	0.32	0.16	0.	0.	0.72	1.617	-2.	0	68		
20261 CC1626	RESIDUA	1.	3.45	0.371	0.41	3.7	0.28	0.12	0.31	0.29	0.	-0.16	0.85	1.897	-3.	0	74		
20261 CC1622	RESIDUA	1.	1.00	0.256	0.41	2.2	0.16	0.07	0.31	0.15	0.	0.	0.70	1.563	-1.	0	68		
20261 CC1622	RESIDUA	1.	3.11	0.380	0.41	3.2	0.24	0.10	0.30	0.27	0.	-0.13	0.77	1.733	-2.	0	76		
20261 CC1222	RESIDUA	1.	1.00	0.258	0.41	2.1	0.16	0.07	0.31	0.15	0.	0.	0.69	1.542	-1.	0	68		
20261 CC1222	RESIDUA	1.	3.11	0.383	0.41	3.1	0.23	0.10	0.29	0.27	0.	-0.13	0.75	1.689	-2.	0	76		
20261 CC0822	RESIDUA	1.	1.00	0.276	0.41	2.2	0.17	0.07	0.31	0.15	0.	0.	0.70	1.561	-1.	0	69		
20261 CC0822	RESIDUA	1.	2.51	0.389	0.41	2.9	0.22	0.09	0.28	0.22	0.	-0.10	0.71	1.596	-2.	0	79		
20261 STIG15	RESIDUA	1.	1.00	0.090	0.41	2.4	0.18	0.08	0.28	0.19	0.	0.	0.72	1.608	-2.	0	68		
20261 STIG15	RESIDUA	1.	72.13	0.171	0.41	29.4	2.18	0.93	1.38	6.46	0.	-4.52	6.43	14.377	-32.	0	63		
20261 STIG10	RESIDUA	1.	1.00	0.129	0.41	2.3	0.17	0.07	0.27	0.18	0.	0.	0.69	1.538	-1.	0	69		
20261 STIG10	RESIDUA	1.	6.67	0.218	0.41	5.1	0.38	0.16	0.33	0.63	0.	-0.36	1.15	2.568	-4.	0	67		
20261 STIG1S	RESIDUA	1.	1.00	0.146	0.41	2.2	0.16	0.07	0.26	0.18	0.	0.	0.67	1.506	-1.	0	69		
20261 STIG1S	RESIDUA	1.	3.91	0.228	0.41	3.6	0.26	0.11	0.26	0.40	0.	-0.19	0.85	1.902	-2.	0	70		
20261 DEADV3	RESIDUA	1.	1.00	0.257	0.41	3.1	0.23	0.10	0.29	0.15	0.	0.	0.77	1.722	-2.	0	73		
20261 DEADV3	RESIDUA	1.	2.58	0.365	0.41	4.2	0.31	0.13	0.27	0.24	0.	-0.10	0.85	1.892	-3.	0	80		
20261 DEHTPM	RESIDUA	1.	1.00	0.299	0.41	3.0	0.22	0.10	0.31	0.14	0.	0.	0.77	1.720	-2.	0	72		
20261 DEHTPM	RESIDUA	1.	2.04	0.397	0.41	3.7	0.27	0.12	0.27	0.19	0.	-0.07	0.78	1.744	-2.	0	83		
20261 DES0A3	DISTILL	1.	1.00	0.244	0.41	2.0	0.15	0.06	0.27	0.19	0.	0.	0.67	1.504	-1.	0	66		
20261 DES0A3	DISTILL	1.	2.60	0.346	0.41	3.2	0.23	0.10	0.24	0.30	0.	-0.10	0.78	1.737	-2.	0	71		
20261 DES0A3	RESIDUA	1.	1.00	0.244	0.41	2.0	0.15	0.06	0.27	0.16	0.	0.	0.64	1.426	-1.	0	71		

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100										
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																				
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUE TOTAL NORML	PRESNT ROI		GROSS															
SYSTEM	FUEL	REQD GEN/ REQD	/HEAT COST RATIO *10**6	+	INSNC	ELEC	WORTH 15%	%	PAY BACK											
20261 DESOAS	RESIDUA	1.	2.60	0.346	0.41	3.2	0.23	0.10	0.24	0.25	0.	-0.10	0.72	1.612	-2.	0	81			
20261 GTSOAS	DISTILL	1.	1.00	0.269	0.41	1.8	0.14	0.06	0.23	0.18	0.	0.	0.61	1.367	-1.	0	68			
20261 GTSOAS	DISTILL	1.	1.51	0.321	0.41	1.8	0.14	0.06	0.17	0.22	0.	-0.03	0.54	1.215	-1.	0	89			
20261 GTRA08	DISTILL	1.	1.00	0.260	0.41	2.4	0.18	0.08	0.26	0.19	0.	0.	0.69	1.554	-1.	0	69			
20261 GTRA08	DISTILL	1.	2.33	0.358	0.41	3.1	0.23	0.10	0.21	0.27	0.	-0.08	0.72	1.609	-2.	0	76			
20261 GTRA12	DISTILL	1.	1.00	0.263	0.41	2.3	0.17	0.07	0.25	0.19	0.	0.	0.68	1.525	-1.	0	69			
20261 GTRA12	DISTILL	1.	2.31	0.362	0.41	3.0	0.22	0.09	0.20	0.27	0.	-0.08	0.70	1.573	-2.	0	76			
20261 GTRA16	DISTILL	1.	1.00	0.263	0.41	2.4	0.18	0.08	0.25	0.19	0.	0.	0.69	1.547	-1.	0	69			
20261 GTRA16	DISTILL	1.	2.18	0.356	0.41	3.0	0.22	0.09	0.20	0.26	0.	-0.08	0.71	1.585	-2.	0	76			
20261 GTR208	DISTILL	1.	1.00	0.262	0.41	2.2	0.16	0.07	0.25	0.19	0.	0.	0.66	1.483	-1.	0	69			
20261 GTR208	DISTILL	1.	1.84	0.335	0.41	2.4	0.18	0.08	0.19	0.24	0.	-0.05	0.63	1.413	-1.	0	78			
20261 GTR212	DISTILL	1.	1.00	0.259	0.41	2.2	0.17	0.07	0.25	0.19	0.	0.	0.67	1.506	-1.	0	69			
20261 GTR212	DISTILL	1.	1.98	0.340	0.41	2.6	0.19	0.08	0.19	0.25	0.	-0.06	0.66	1.474	-1.	0	77			
20261 GTR216	DISTILL	1.	1.00	0.264	0.41	2.3	0.17	0.07	0.25	0.19	0.	0.	0.68	1.511	-1.	0	69			
20261 GTR216	DISTILL	1.	2.02	0.349	0.41	2.7	0.20	0.09	0.20	0.25	0.	-0.06	0.67	1.492	-2.	0	77			
20261 GTRW08	DISTILL	1.	1.00	0.217	0.41	2.5	0.18	0.08	0.26	0.20	0.	0.	0.72	1.608	-2.	0	68			
20261 GTRW08	DISTILL	1.	2.81	0.314	0.41	3.5	0.26	0.11	0.23	0.34	0.	-0.11	0.82	1.826	-2.	0	71			
20261 GTRW12	DISTILL	1.	1.00	0.229	0.41	2.5	0.18	0.08	0.26	0.19	0.	0.	0.71	1.599	-2.	0	68			
20261 GTRW12	DISTILL	1.	2.90	0.334	0.41	3.5	0.26	0.11	0.23	0.33	0.	-0.12	0.82	1.825	-2.	0	71			
20261 GTRW16	DISTILL	1.	1.00	0.230	0.41	2.5	0.19	0.08	0.26	0.19	0.	0.	0.72	1.617	-2.	0	68			
20261 GTRW16	DISTILL	1.	2.72	0.331	0.41	3.6	0.26	0.11	0.23	0.32	0.	-0.11	0.81	1.820	-2.	0	72			
20261 GTR308	DISTILL	1.	1.00	0.211	0.41	2.2	0.17	0.07	0.25	0.20	0.	0.	0.69	1.539	-1.	0	67			
20261 GTR308	DISTILL	1.	2.11	0.282	0.41	2.7	0.20	0.08	0.20	0.29	0.	-0.07	0.70	1.565	-2.	0	71			
20261 GTR312	DISTILL	1.	1.00	0.232	0.41	2.3	0.17	0.07	0.26	0.19	0.	0.	0.70	1.556	-1.	0	68			
20261 GTR312	DISTILL	1.	2.43	0.323	0.41	3.0	0.22	0.09	0.21	0.30	0.	-0.09	0.73	1.640	-2.	0	72			
20261 GTR316	DISTILL	1.	1.00	0.230	0.41	2.4	0.18	0.08	0.26	0.19	0.	0.	0.71	1.581	-2.	0	68			
20261 GTR316	DISTILL	1.	2.39	0.320	0.41	3.1	0.23	0.10	0.21	0.30	0.	-0.09	0.75	1.678	-2.	0	72			
20261 FCPADS	DISTILL	1.	1.00	0.250	0.41	1.8	0.14	0.06	0.23	0.19	0.	0.	0.61	1.367	-1.	0	68			
20261 FCPADS	DISTILL	1.	2.86	0.364	0.41	2.7	0.20	0.09	0.23	0.31	0.	-0.12	0.71	1.583	-2.	0	71			
20261 FCMCDS	DISTILL	1.	1.00	0.226	0.41	2.0	0.15	0.06	0.23	0.19	0.	0.	0.64	1.432	-1.	0	68			
20261 FCMCDS	DISTILL	1.	4.35	0.360	0.41	4.2	0.31	0.13	0.31	0.44	0.	-0.21	0.98	2.201	-3.	0	68			
20461 ONOCN	COAL-FG	29.	0.	0.	0.15	42.8	3.25	1.38	2.16	10.81	7.24	0.	24.84	1.000	0.	0	0			
20461 STM141	RESIDUA	29.	1.00	0.176	0.15	29.6	2.24	0.95	1.57	21.36	0.	0.	26.12	1.052	2.	-11	0			
20461 STM141	RESIDUA	29.	2.04	0.277	0.15	28.1	2.13	0.91	1.29	24.21	0.	-4.51	24.03	0.968	10.	999	0			
20461 STM141	COAL-FG	29.	1.00	0.176	0.15	51.9	3.94	1.67	3.04	12.40	0.	0.	21.05	0.848	7.	27	4			
20461 STM141	COAL-FG	29.	2.04	0.277	0.15	59.0	4.48	1.90	2.90	14.06	0.	-4.51	18.83	0.758	11.	25	4			
20461 STM141	COAL-AF	29.	1.00	0.176	0.15	43.4	3.30	1.40	2.83	12.40	0.	0.	19.93	0.802	15.	999	1			
20461 STM141	COAL-AF	29.	2.04	0.277	0.15	41.8	3.17	1.35	2.57	14.06	0.	-4.51	16.64	0.670	26.	999	0			
20461 STM088	RESIDUA	29.	1.00	0.176	0.15	24.9	1.89	0.80	1.44	21.36	0.	0.	25.50	1.027	7.	-7	0			
20461 STM088	RESIDUA	29.	1.61	0.241	0.15	25.8	1.96	0.83	1.23	23.03	0.	-2.64	24.41	0.983	10.	-2	0			
20461 STM088	COAL-FG	29.	1.00	0.176	0.15	51.1	3.88	1.65	2.98	12.40	0.	0.	20.91	0.842	8.	30	4			
20461 STM088	COAL-FG	29.	1.61	0.241	0.15	55.5	4.21	1.79	2.73	13.37	0.	-2.64	19.46	0.784	11.	28	4			
20461 STM088	COAL-AF	29.	1.00	0.176	0.15	42.0	3.19	1.36	2.80	12.40	0.	0.	19.75	0.795	16.	999	0			
20461 STM088	COAL-AF	29.	1.61	0.241	0.15	40.5	3.07	1.31	2.49	13.37	0.	-2.64	17.60	0.709	24.	999	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC					WORTH 15%	%	PAY BACK						
20461 PFBSTM	COAL-PF	29.	1.00	0.174	0.15	52.3	3.97	1.69	3.40	12.43	0.	0.	21.49	0.865	6.	24	4		
20461 PFBSTM	COAL-PF	29.	2.96	0.332	0.15	58.6	4.44	1.89	4.23	15.59	0.	-8.49	17.66	0.711	15.	29	4		
20461 TISTMT	RESIDUA	29.	1.00	0.173	0.15	69.3	5.26	2.24	2.56	21.43	0.	0.	31.48	1.267	-33.	0	61		
20461 TISTMT	RESIDUA	29.	3.80	0.368	0.15	150.9	11.45	4.87	4.45	29.30	0.	-12.18	37.90	1.526	-93.	0	80		
20461 TISTMT	COAL	29.	1.00	0.173	0.15	95.5	7.24	3.08	4.09	12.44	0.	0.	26.85	1.081	-32.	1	23		
20461 TISTMT	COAL	29.	3.80	0.368	0.15	189.7	14.40	6.12	6.28	17.01	0.	-12.18	31.63	1.274	-92.	0	28		
20461 TIHRSG	RESIDUA	29.	1.00	0.152	0.15	97.4	7.21	3.07	3.14	21.96	0.	0.	35.38	1.424	-58.	0	63		
20461 TIHRSG	RESIDUA	29.	1.41	0.192	0.15	119.8	8.87	3.77	3.46	23.32	0.	-1.76	37.66	1.516	-76.	0	65		
20461 TIHRSG	COAL	29.	1.00	0.152	0.15	132.0	10.01	4.26	4.89	12.75	0.	0.	31.91	1.285	-65.	0	999		
20461 TIHRSG	COAL	29.	1.41	0.192	0.15	152.7	11.59	4.93	5.05	13.54	0.	-1.76	33.34	1.342	-79.	0	999		
20461 STIRL	DISTILL	29.	1.00	0.129	0.15	38.3	2.84	1.21	1.74	27.66	0.	0.	33.45	1.347	-24.	-79	0		
20461 STIRL	DISTILL	29.	4.14	0.284	0.15	75.9	5.62	2.39	2.54	42.89	0.	-13.65	39.80	1.602	-62.	0	58		
20461 STIRL	RESIDUA	29.	1.00	0.129	0.15	38.4	2.84	1.21	1.74	22.57	0.	0.	28.36	1.142	-8.	-38	0		
20461 STIRL	RESIDUA	29.	4.14	0.284	0.15	76.0	5.63	2.39	2.55	34.99	0.	-13.65	31.91	1.285	-37.	0	62		
20461 STIRL	COAL	29.	1.00	0.129	0.15	64.4	4.77	2.03	3.30	13.10	0.	0.	23.20	0.934	-5.	10	8		
20461 STIRL	COAL	29.	4.14	0.284	0.15	134.1	9.94	4.22	5.05	20.32	0.	-13.65	25.87	1.042	-46.	4	15		
20461 HEGT85	COAL-AF	29.	1.00	0.091	0.15	81.5	6.19	2.63	3.61	13.68	0.	0.	26.11	1.051	-23.	2	21		
20461 HEGT85	COAL-AF	29.	8.00	0.244	0.15	233.6	17.72	7.54	8.43	33.80	0.	-30.42	37.06	1.492	-130.	0	999		
20461 HEGT60	COAL-AF	29.	1.00	0.089	0.15	79.3	6.02	2.56	3.58	13.70	0.	0.	25.86	1.041	-21.	2	19		
20461 HEGT60	COAL-AF	29.	4.62	0.204	0.15	156.6	11.89	5.05	5.89	24.18	0.	-15.72	31.28	1.259	-75.	0	999		
20461 HEGT00	COAL-AF	29.	1.00	0.082	0.15	76.3	5.79	2.46	3.55	13.81	0.	0.	25.61	1.031	-19.	3	18		
20461 HEGT00	COAL-AF	29.	2.30	0.138	0.15	99.5	7.53	3.21	4.03	17.72	0.	-5.65	26.87	1.082	-34.	1	22		
20461 FCMCCL	COAL	29.	1.00	0.151	0.15	75.2	5.84	2.48	3.85	12.77	0.	0.	24.96	1.005	-17.	5	14		
20461 FCMCCL	COAL	29.	4.33	0.338	0.15	125.4	9.75	4.15	6.56	19.32	0.	-14.47	25.30	1.019	-43.	4	14		
20461 FCSTCL	COAL	29.	1.00	0.157	0.15	72.3	5.62	2.39	3.74	12.68	0.	0.	24.42	0.983	-14.	6	12		
20461 FCSTCL	COAL	29.	7.65	0.419	0.15	163.2	12.69	5.40	8.55	25.10	0.	-28.88	22.86	0.921	-54.	6	12		
20461 IGGTST	COAL	29.	1.00	0.129	0.15	69.0	5.36	2.28	3.31	13.11	0.	0.	24.06	0.969	-11.	7	11		
20461 IGGTST	COAL	29.	5.48	0.312	0.15	128.9	10.02	4.26	4.25	23.41	0.	-19.47	22.47	0.905	-35.	7	11		
20461 GTSOAR	RESIDUA	29.	1.00	0.137	0.15	32.2	2.38	1.01	1.52	22.36	0.	0.	27.28	1.098	-2.	-18	0		
20461 GTSOAR	RESIDUA	29.	4.32	0.306	0.15	51.5	3.81	1.62	1.82	34.78	0.	-14.42	27.62	1.112	-12.	0	58		
20461 GTAC08	RESIDUA	29.	1.00	0.148	0.15	30.4	2.25	0.96	1.48	22.09	0.	0.	26.78	1.078	0.	-14	0		
20461 GTAC08	RESIDUA	29.	3.60	0.307	0.15	39.2	2.90	1.23	1.50	31.11	0.	-11.28	25.46	1.025	0.	-13	0		
20461 GTAC12	RESIDUA	29.	1.00	0.150	0.15	31.0	2.30	0.98	1.49	22.01	0.	0.	26.78	1.078	-0.	-15	0		
20461 GTAC12	RESIDUA	29.	4.37	0.337	0.15	46.2	3.42	1.46	1.68	33.48	0.	-14.66	25.39	1.022	-3.	0	56		
20461 GTAC16	RESIDUA	29.	1.00	0.150	0.15	31.8	2.36	1.00	1.50	22.03	0.	0.	26.89	1.083	-1.	-18	0		
20461 GTAC16	RESIDUA	29.	4.88	0.350	0.15	55.7	4.13	1.75	1.93	35.25	0.	-16.84	26.22	1.056	-10.	0	74		
20461 GTWC16	RESIDUA	29.	1.00	0.131	0.15	31.7	2.35	1.00	1.51	22.51	0.	0.	27.37	1.102	-2.	-18	0		
20461 GTWC16	RESIDUA	29.	5.29	0.315	0.15	49.6	3.67	1.56	1.80	39.23	0.	-18.65	27.62	1.112	-11.	0	57		
20461 CC1626	RESIDUA	29.	1.00	0.133	0.15	32.0	2.43	1.03	1.61	22.47	0.	0.	27.54	1.109	-3.	-19	0		
20461 CC1626	RESIDUA	29.	9.50	0.371	0.15	78.3	5.94	2.53	2.76	55.28	0.	-36.93	29.57	1.190	-32.	0	73		
20461 CC1622	RESIDUA	29.	1.00	0.139	0.15	31.9	2.42	1.03	1.60	22.31	0.	0.	27.37	1.102	-3.	-18	0		
20461 CC1622	RESIDUA	29.	8.57	0.380	0.15	79.2	6.01	2.56	2.71	50.31	0.	-32.89	28.70	1.155	-29.	0	94		
20461 CC1222	RESIDUA	29.	1.00	0.140	0.15	31.3	2.38	1.01	1.59	22.28	0.	0.	27.26	1.097	-2.	-17	0		
20461 CC1222	RESIDUA	29.	8.56	0.383	0.15	74.2	5.63	2.40	2.63	49.99	0.	-32.85	27.80	1.119	-24.	0	137		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS							
SYSTEM	FUEL	REQD	GEN/	7HEAT COST	+	ELEC							WORTH	%	PAY				
		MW	REQD	RATIO *10**6	INSNC								15%		BACK				
20461 CC0822 RESIDUA	29.	1.00	0.150	0.15	31.2	2.36	1.01	1.59	22.03	0.	0.	26.99	1.087	-1.	-16	0			
20461 CC0822 RESIDUA	29.	6.92	0.389	0.15	61.2	4.65	1.98	2.26	42.25	0.	-25.72	25.41	1.023	-11.	2	20			
20461 STIG15 RESIDUA	29.	1.00	0.049	0.15	35.4	2.62	1.11	1.79	24.65	0.	0.	30.18	1.215	-13.	-38	0			
20461 STIG15 RESIDUA	29.	198.62	0.171	0.15	1371.1	101.56	43.18	73.68	1217.15	0.	-858.46	577.08	23.233	-2357.	0	59			
20461 STIG10 RESIDUA	29.	1.00	0.070	0.15	34.4	2.55	1.08	1.71	24.10	0.	0.	29.44	1.185	-10.	-31	0			
20461 STIG10 RESIDUA	29.	18.37	0.218	0.15	145.3	10.76	4.58	6.80	119.42	0.	-75.44	66.11	2.662	-177.	0	59			
20461 STIG1S RESIDUA	29.	1.00	0.079	0.15	30.7	2.28	0.97	1.63	23.85	0.	0.	28.72	1.156	-6.	-22	0			
20461 STIG1S RESIDUA	29.	10.78	0.228	0.15	91.2	6.76	2.87	4.45	75.06	0.	-42.47	46.67	1.879	-91.	0	58			
20461 DEADV3 RESIDUA	29.	1.00	0.111	0.15	41.0	3.04	1.29	1.79	23.03	0.	0.	29.15	1.174	-12.	-77	0			
20461 DEADV3 RESIDUA	29.	9.90	0.314	0.15	182.6	13.52	5.75	5.36	62.28	0.	-38.65	48.26	1.943	-138.	0	66			
20461 DEHTPM RESIDUA	29.	1.00	0.162	0.15	40.3	2.98	1.27	1.82	21.70	0.	0.	27.78	1.118	-7.	-46	0			
20461 DEHTPM RESIDUA	29.	5.63	0.397	0.15	107.7	7.98	3.39	3.45	36.00	0.	-20.10	30.71	1.237	-48.	0	147			
20461 DESOA3 DISTILL	29.	1.00	0.097	0.15	45.7	3.38	1.44	1.91	28.69	0.	0.	35.43	1.426	-34.	0	56			
20461 DESOA3 DISTILL	29.	11.12	0.279	0.15	254.2	18.83	8.00	7.19	88.14	0.	-43.95	78.21	3.149	-266.	0	61			
20461 DESOA3 RESIDUA	29.	1.00	0.097	0.15	45.7	3.38	1.44	1.91	23.41	0.	0.	30.14	1.214	-17.	0	56			
20461 DESOA3 RESIDUA	29.	11.12	0.279	0.15	254.2	18.83	8.00	7.19	71.91	0.	-43.95	61.97	2.495	-215.	0	65			
20461 GTSOAD DISTILL	29.	1.00	0.146	0.15	29.8	2.21	0.94	1.46	27.13	0.	0.	31.73	1.278	-15.	-31	0			
20461 GTSOAD DISTILL	29.	4.16	0.321	0.15	40.1	2.97	1.26	1.53	40.73	0.	-13.71	32.79	1.320	-23.	104	0			
20461 GTRA08 DISTILL	29.	1.00	0.141	0.15	33.1	2.45	1.04	1.53	27.28	0.	0.	32.30	1.301	-18.	-41	0			
20461 GTRA08 DISTILL	29.	6.42	0.358	0.15	71.0	5.26	2.24	2.35	51.49	0.	-23.56	37.78	1.521	-53.	0	58			
20461 GTRA12 DISTILL	29.	1.00	0.143	0.15	33.3	2.46	1.05	1.54	27.23	0.	0.	32.28	1.300	-18.	-41	0			
20461 GTRA12 DISTILL	29.	6.37	0.362	0.15	70.3	5.21	2.21	2.33	50.92	0.	-23.32	37.34	1.504	-51.	0	58			
20461 GTRA16 DISTILL	29.	1.00	0.143	0.15	34.0	2.52	1.07	1.56	27.22	0.	0.	32.38	1.303	-19.	-44	0			
20461 GTRA16 DISTILL	29.	6.01	0.356	0.15	71.3	5.28	2.25	2.35	49.31	0.	-21.78	37.41	1.506	-52.	0	58			
20461 GTR208 DISTILL	29.	1.00	0.142	0.15	32.0	2.37	1.01	1.51	27.25	0.	0.	32.15	1.294	-17.	-37	0			
20461 GTR208 DISTILL	29.	5.06	0.335	0.15	56.1	4.16	1.77	1.95	45.27	0.	-17.65	35.51	1.430	-39.	0	57			
20461 GTR212 DISTILL	29.	1.00	0.141	0.15	32.6	2.41	1.03	1.52	27.30	0.	0.	32.26	1.299	-18.	-39	0			
20461 GTR212 DISTILL	29.	5.44	0.340	0.15	60.7	4.50	1.91	2.07	47.17	0.	-19.28	36.37	1.464	-44.	0	57			
20461 GTR216 DISTILL	29.	1.00	0.143	0.15	33.2	2.46	1.05	1.54	27.21	0.	0.	32.26	1.299	-18.	-41	0			
20461 GTR216 DISTILL	29.	5.56	0.349	0.15	65.0	4.81	2.05	2.18	47.23	0.	-19.81	36.46	1.468	-46.	0	57			
20461 GTRW08 DISTILL	29.	1.00	0.118	0.15	32.9	2.44	1.04	1.53	28.02	0.	0.	33.03	1.330	-20.	-43	0			
20461 GTRW08 DISTILL	29.	7.74	0.314	0.15	73.0	5.41	2.30	2.44	63.08	0.	-29.26	43.96	1.770	-73.	0	57			
20461 GTRW12 DISTILL	29.	1.00	0.124	0.15	32.9	2.44	1.04	1.53	27.82	0.	0.	32.83	1.322	-20.	-42	0			
20461 GTRW12 DISTILL	29.	7.98	0.334	0.15	74.3	5.50	2.34	2.47	62.76	0.	-30.33	42.75	1.721	-70.	0	57			
20461 GTRW16 DISTILL	29.	1.00	0.125	0.15	33.4	2.48	1.05	1.55	27.79	0.	0.	32.87	1.323	-20.	-44	0			
20461 GTRW16 DISTILL	29.	7.50	0.331	0.15	74.2	5.50	2.34	2.46	60.11	0.	-28.23	42.18	1.698	-68.	0	57			
20461 GTR308 DISTILL	29.	1.00	0.114	0.15	32.1	2.38	1.01	1.52	28.13	0.	0.	33.04	1.330	-20.	-41	0			
20461 GTR308 DISTILL	29.	5.82	0.282	0.15	59.5	4.41	1.87	2.07	53.73	0.	-20.94	41.14	1.656	-58.	0	56			
20461 GTR312 DISTILL	29.	1.00	0.126	0.15	32.1	2.38	1.01	1.51	27.77	0.	0.	32.67	1.316	-19.	-40	0			
20461 GTR312 DISTILL	29.	6.68	0.323	0.15	63.9	4.73	2.01	2.19	55.90	0.	-24.68	40.16	1.617	-57.	0	57			
20461 GTR316 DISTILL	29.	1.00	0.125	0.15	32.7	2.42	1.03	1.53	27.79	0.	0.	32.78	1.320	-20.	-42	0			
20461 GTR316 DISTILL	29.	6.58	0.320	0.15	65.9	4.88	2.08	2.24	55.58	0.	-24.25	40.52	1.631	-59.	0	57			
20461 FCPADS DISTILL	29.	1.00	0.092	0.15	42.7	3.16	1.34	3.73	28.84	0.	0.	37.08	1.493	-38.	999	0			
20461 FCPADS DISTILL	29.	15.15	0.279	0.15	244.7	18.13	7.71	38.13	114.09	0.	-61.46	116.59	4.694	-386.	0	60			

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100							
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																	
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES	GEN/	/HEAT COST						PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS	
SYSTEM	FUEL	REQD	REQD	RATIO *10**6	INSNC	ELEC	WORTH	%	PAY							BACK	
		MW					15%										
20461 FCMCDS DISTILL	29.	1.00	0.123	0.15	43.9	3.25	1.38	3.59	27.86	0.	0.	36.08	1.453	-35.	999	0	
20461 FCMCDS DISTILL	29.	11.98	0.360	0.15	210.2	15.57	6.62	28.67	83.24	0.	-47.71	86.40	3.478	-274.	0	61	
20631 ONOCGN COAL-FG	5.	0.	0.	0.05	20.6	1.56	0.66	1.13	1.64	0.51	0.	5.51	1.000	0.	0	0	
20631 STM141 RESIDUA	5.	1.00	0.095	0.05	11.7	0.89	0.38	0.89	3.02	0.	0.	5.17	0.940	5.	-1	0	
20631 STM141 RESIDUA	5.	5.64	0.315	0.05	16.3	1.23	0.52	0.87	3.91	0.	-1.41	5.13	0.932	3.	999	0	
20631 STM141 COAL-FG	5.	1.00	0.095	0.05	26.6	2.02	0.86	1.67	1.75	0.	0.	6.30	1.143	-5.	0	87	
20631 STM141 COAL-FG	5.	5.64	0.315	0.05	29.2	2.22	0.94	1.53	2.27	0.	-1.41	5.55	1.008	-4.	4	14	
20631 STM141 COAL-AF	5.	1.00	0.095	0.05	25.1	1.90	0.81	1.57	1.75	0.	0.	6.04	1.096	-4.	0	111	
20631 STM141 COAL-AF	5.	5.64	0.315	0.05	21.3	1.61	0.69	1.27	2.27	0.	-1.41	4.43	0.803	3.	79	2	
20631 STM088 RESIDUA	5.	1.00	0.095	0.05	11.5	0.87	0.37	0.89	3.02	0.	0.	5.16	0.937	5.	-1	0	
20631 STM088 RESIDUA	5.	4.46	0.278	0.05	14.7	1.12	0.48	0.83	3.68	0.	-1.05	5.06	0.918	4.	999	0	
20631 STM088 COAL-FG	5.	1.00	0.095	0.05	26.6	2.02	0.86	1.68	1.75	0.	0.	6.31	1.146	-5.	0	85	
20631 STM088 COAL-FG	5.	4.46	0.278	0.05	27.2	2.06	0.88	1.46	2.14	0.	-1.05	5.49	0.997	-3.	5	13	
20631 STM088 COAL-AF	5.	1.00	0.095	0.05	25.0	1.90	0.81	1.58	1.75	0.	0.	6.04	1.096	-4.	0	107	
20631 STM088 COAL-AF	5.	4.46	0.278	0.05	20.3	1.54	0.65	1.23	2.14	0.	-1.05	4.51	0.819	3.	999	0	
20631 PFBSTM COAL-PF	5.	1.00	0.095	0.05	26.3	2.00	0.85	1.61	1.76	0.	0.	6.22	1.129	-5.	0	94	
20631 PFBSTM COAL-PF	5.	8.18	0.369	0.05	34.8	2.64	1.12	1.86	2.57	0.	-2.18	6.00	1.090	-8.	2	22	
20631 TISTMT RESIDUA	5.	1.00	0.094	0.05	22.2	1.69	0.72	1.13	3.02	0.	0.	6.56	1.191	-4.	0	57	
20631 TISTMT RESIDUA	5.	8.26	0.368	0.05	72.4	5.49	2.33	2.48	4.45	0.	-2.21	12.56	2.280	-47.	0	74	
20631 TISTMT COAL	5.	1.00	0.094	0.05	36.1	2.74	1.16	1.87	1.76	0.	0.	7.53	1.367	-14.	0	79	
20631 TISTMT COAL	5.	10.53	0.403	0.05	105.9	8.03	3.42	3.50	2.84	0.	-2.90	14.90	2.705	-70.	0	93	
20631 TIHRSG RESIDUA	5.	1.00	0.083	0.05	29.5	2.19	0.93	1.26	3.06	0.	0.	7.44	1.351	-10.	0	61	
20631 TIHRSG RESIDUA	5.	3.05	0.192	0.05	57.8	4.28	1.82	1.97	3.54	0.	-0.62	10.99	1.996	-34.	0	69	
20631 TIHRSG COAL	5.	1.00	0.083	0.05	46.3	3.52	1.50	2.09	1.78	0.	0.	8.88	1.612	-23.	0	77	
20631 TIHRSG COAL	5.	3.89	0.223	0.05	85.1	6.46	2.74	2.79	2.17	0.	-0.88	13.28	2.412	-55.	0	81	
20631 STIRL DISTILL	5.	1.00	0.070	0.05	14.3	1.06	0.45	0.89	3.81	0.	0.	6.20	1.126	1.	-12	0	
20631 STIRL DISTILL	5.	9.00	0.284	0.05	31.4	2.32	0.99	1.44	6.52	0.	-2.43	8.84	1.604	-15.	0	59	
20631 STIRL RESIDUA	5.	1.00	0.070	0.05	14.3	1.06	0.45	0.89	3.10	0.	0.	5.50	0.999	3.	-5	0	
20631 STIRL RESIDUA	5.	9.00	0.284	0.05	31.4	2.33	0.99	1.44	5.32	0.	-2.43	7.64	1.387	-12.	0	63	
20631 STIRL COAL	5.	1.00	0.070	0.05	26.9	2.00	0.85	1.59	1.80	0.	0.	6.24	1.132	-5.	0	89	
20631 STIRL COAL	5.	11.48	0.309	0.05	62.4	4.62	1.97	2.43	3.48	0.	-3.18	9.32	1.693	-31.	0	170	
20631 HEGT85 COAL-AF	5.	1.00	0.049	0.05	32.9	2.50	1.06	1.62	1.84	0.	0.	7.02	1.275	-11.	0	83	
20631 HEGT85 COAL-AF	5.	22.17	0.258	0.05	133.9	10.16	4.32	4.24	6.10	0.	-6.43	18.39	3.339	-95.	0	88	
20631 HEGT60 COAL-AF	5.	1.00	0.048	0.05	32.5	2.46	1.05	1.62	1.84	0.	0.	6.98	1.267	-10.	0	82	
20631 HEGT60 COAL-AF	5.	12.79	0.221	0.05	90.0	6.83	2.91	2.98	4.23	0.	-3.58	13.36	2.427	-58.	0	53	
20631 HEGT00 COAL-AF	5.	1.00	0.045	0.05	32.0	2.43	1.03	1.63	1.85	0.	0.	6.93	1.259	-10.	0	82	
20631 HEGT00 COAL-AF	5.	6.37	0.156	0.05	57.2	4.34	1.84	2.04	2.98	0.	-1.63	9.57	1.737	-30.	0	91	
20631 FCMCCL COAL	5.	1.00	0.151	0.05	33.4	2.60	1.10	1.69	2.23	0.	0.	7.63	1.385	-13.	0	70	
20631 FCMCCL COAL	5.	12.00	0.280	0.05	70.9	5.51	2.34	2.81	3.74	0.	-3.34	11.07	2.009	-42.	0	101	
20631 FCSTCL COAL	5.	1.00	0.148	0.05	32.5	2.52	1.07	1.72	2.23	0.	0.	7.54	1.369	-12.	0	69	
20631 FCSTCL COAL	5.	21.18	0.386	0.05	92.1	7.16	3.05	3.67	4.86	0.	-6.13	12.61	2.290	-58.	0	155	
20631 IGGTST COAL	5.	1.00	0.163	0.05	31.6	2.46	1.04	1.75	2.26	0.	0.	7.51	1.363	-12.	0	68	
20631 IGGTST COAL	5.	15.18	0.262	0.05	71.5	5.56	2.33	2.60	4.54	0.	-4.31	10.74	1.950	-42.	0	122	
20631 GTSOAR RESIDUA	5.	1.00	0.074	0.05	13.7	1.01	0.43	0.84	3.09	0.	0.	5.37	0.975	4.	-3	0	

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVENUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW											15%		BACK				
20631 GTSCAR RESIDUA	5.	9.38	0.306	0.05	23.5	1.74	0.74	1.16	5.28	0.	-2.55	6.38	1.158	-4.	0	59			
20631 GTAC08 RESIDUA	5.	1.00	0.080	0.05	13.1	0.97	0.41	0.82	3.07	0.	0.	5.28	0.959	4.	-2	0			
20631 GTAC08 RESIDUA	5.	7.81	0.307	0.05	19.6	1.45	0.62	1.05	4.73	0.	-2.07	5.78	1.050	-0.	-17	0			
20631 GTAC12 RESIDUA	5.	1.00	0.082	0.05	13.1	0.97	0.41	0.82	3.07	0.	0.	5.27	0.956	5.	-2	0			
20631 GTAC12 RESIDUA	5.	9.50	0.337	0.05	22.3	1.65	0.70	1.13	5.09	0.	-2.58	5.99	1.088	-2.	0	58			
20631 GTAC16 RESIDUA	5.	1.00	0.081	0.05	13.2	0.98	0.42	0.82	3.07	0.	0.	5.28	0.959	4.	-2	0			
20631 GTAC16 RESIDUA	5.	10.59	0.350	0.05	24.8	1.84	0.78	1.20	5.35	0.	-2.91	6.26	1.136	-4.	0	63			
20631 GTWC16 RESIDUA	5.	1.00	0.071	0.05	13.5	1.00	0.43	0.83	3.10	0.	0.	5.36	0.972	4.	-3	0			
20631 GTWC16 RESIDUA	5.	11.49	0.315	0.05	24.9	1.85	0.79	1.22	5.96	0.	-3.19	6.62	1.202	-5.	0	60			
20631 CC1626 RESIDUA	5.	1.00	0.072	0.05	13.4	1.02	0.43	0.89	3.10	0.	0.	5.44	0.988	4.	-4	0			
20631 CC1626 RESIDUA	5.	20.63	0.371	0.05	35.0	2.65	1.13	1.64	8.40	0.	-5.97	7.86	1.427	-14.	0	68			
20631 CC1622 RESIDUA	5.	1.00	0.075	0.05	13.1	1.00	0.42	0.89	3.09	0.	0.	5.40	0.980	4.	-3	0			
20631 CC1622 RESIDUA	5.	18.61	0.380	0.05	34.6	2.62	1.12	1.61	7.64	0.	-5.35	7.64	1.387	-13.	0	70			
20631 CC1222 RESIDUA	5.	1.00	0.076	0.05	13.0	0.99	0.42	0.88	3.08	0.	0.	5.37	0.976	4.	-3	0			
20631 CC1222 RESIDUA	5.	18.59	0.383	0.05	32.9	2.50	1.06	1.58	7.59	0.	-5.35	7.38	1.341	-12.	0	70			
20631 CC0822 RESIDUA	5.	1.00	0.081	0.05	13.2	1.00	0.43	0.89	3.07	0.	0.	5.38	0.978	4.	-3	0			
20631 CC0822 RESIDUA	5.	15.03	0.389	0.05	28.1	2.13	0.91	1.43	6.42	0.	-4.26	6.62	1.203	-7.	0	71			
20631 STIG15 RESIDUA	5.	1.00	0.026	0.05	16.3	1.20	0.51	0.91	3.25	0.	0.	5.87	1.066	1.	-10	0			
20631 STIG15 RESIDUA	5.	431.21	0.171	0.05	510.6	37.82	16.08	20.00	184.92	0.	-130.78	128.03	23.247	-614.	0	61			
20631 STIG10 RESIDUA	5.	1.00	0.038	0.05	13.1	0.97	0.41	0.83	3.21	0.	0.	5.42	0.984	4.	-4	0			
20631 STIG10 RESIDUA	5.	39.88	0.218	0.05	56.7	4.20	1.79	2.56	18.14	0.	-11.82	14.87	2.699	-46.	0	61			
20631 STIG1S RESIDUA	5.	1.00	0.043	0.05	13.0	0.96	0.41	0.83	3.19	0.	0.	5.39	0.979	4.	-4	0			
20631 STIG1S RESIDUA	5.	23.40	0.228	0.05	39.1	2.90	1.23	1.90	11.40	0.	-6.81	10.62	1.929	-25.	0	60			
20631 DEADV3 RESIDUA	5.	1.00	0.060	0.05	16.3	1.21	0.51	0.92	3.14	0.	0.	5.79	1.051	1.	-9	0			
20631 DEADV3 RESIDUA	5.	21.49	0.314	0.05	70.2	5.20	2.21	2.51	9.46	0.	-6.23	13.16	2.389	-47.	0	68			
20631 DEHTPM RESIDUA	5.	1.00	0.088	0.05	16.2	1.20	0.51	0.95	3.04	0.	0.	5.71	1.036	2.	-8	0			
20631 DEHTPM RESIDUA	5.	12.22	0.397	0.05	42.8	3.17	1.35	1.80	5.47	0.	-3.41	8.38	1.522	-19.	0	74			
20631 DESOA3 DISTILL	5.	1.00	0.052	0.05	15.5	1.15	0.49	0.91	3.88	0.	0.	6.42	1.166	-0.	-15	0			
20631 DESOA3 DISTILL	5.	24.14	0.279	0.05	96.0	7.11	3.02	3.19	13.39	0.	-7.03	19.68	3.574	-80.	0	64			
20631 DESOA3 RESIDUA	5.	1.00	0.052	0.05	15.5	1.15	0.49	0.91	3.16	0.	0.	5.71	1.036	2.	-8	0			
20631 DESOA3 RESIDUA	5.	24.14	0.279	0.05	96.0	7.11	3.02	3.19	10.92	0.	-7.03	17.22	3.126	-72.	0	68			
20631 GTSOAD DISTILL	5.	1.00	0.079	0.05	12.9	0.95	0.41	0.82	3.77	0.	0.	5.94	1.079	2.	-9	0			
20631 GTSOAD DISTILL	5.	9.02	0.321	0.05	20.0	1.48	0.63	1.07	6.19	0.	-2.44	6.93	1.258	-4.	-67	0			
20631 GTRA08 DISTILL	5.	1.00	0.077	0.05	13.8	1.02	0.44	0.83	3.78	0.	0.	6.07	1.102	2.	-10	0			
20631 GTRA08 DISTILL	5.	13.95	0.358	0.05	32.0	2.37	1.01	1.40	7.82	0.	-3.94	8.67	1.575	-15.	0	60			
20631 GTRA12 DISTILL	5.	1.00	0.077	0.05	13.8	1.02	0.43	0.83	3.78	0.	0.	6.06	1.100	2.	-10	0			
20631 GTRA12 DISTILL	5.	13.83	0.362	0.05	30.7	2.27	0.97	1.37	7.74	0.	-3.90	8.45	1.533	-14.	0	60			
20631 GTRA16 DISTILL	5.	1.00	0.078	0.05	14.0	1.04	0.44	0.84	3.78	0.	0.	6.09	1.105	2.	-11	0			
20631 GTRA16 DISTILL	5.	13.06	0.356	0.05	31.1	2.30	0.98	1.37	7.49	0.	-3.66	8.48	1.540	-14.	0	60			
20631 GTR208 DISTILL	5.	1.00	0.077	0.05	13.5	1.00	0.43	0.83	3.78	0.	0.	6.03	1.095	2.	-10	0			
20631 GTR208 DISTILL	5.	10.99	0.335	0.05	25.2	1.87	0.79	1.22	6.88	0.	-3.04	7.72	1.401	-9.	0	57			
20631 GTR212 DISTILL	5.	1.00	0.076	0.05	13.6	1.01	0.43	0.83	3.78	0.	0.	6.05	1.099	2.	-10	0			
20631 GTR212 DISTILL	5.	11.81	0.340	0.05	27.0	2.00	0.85	1.27	7.17	0.	-3.29	8.00	1.452	-11.	0	58			
20631 GTR216 DISTILL	5.	1.00	0.078	0.05	13.7	1.02	0.43	0.83	3.77	0.	0.	6.06	1.099	2.	-10	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST														
		MW	REQD	RATIO	*10**6		INSNC		ELEC						WORTH	%	PAY	BACK	
															15%				
20631	GTR216	DISTILL	5.	12.08	0.349	0.05	28.6	2.12	0.90	1.31	7.18	0.	-3.37	8.13	1.476	-12.	0	59	
20631	GTRW08	DISTILL	5.	1.00	0.064	0.05	13.9	1.03	0.44	0.84	3.83	0.	0.	6.13	1.114	1.	-11	0	
20631	GTRW08	DISTILL	5.	16.80	0.314	0.05	32.2	2.39	1.01	1.44	9.58	0.	-4.80	9.62	1.747	-18.	0	59	
20631	GTRW12	DISTILL	5.	1.00	0.067	0.05	13.9	1.03	0.44	0.83	3.82	0.	0.	6.12	1.111	1.	-11	0	
20631	GTRW12	DISTILL	5.	17.33	0.334	0.05	32.7	2.42	1.03	1.45	9.53	0.	-4.96	9.48	1.721	-18.	0	59	
20631	GTRW16	DISTILL	5.	1.00	0.068	0.05	14.1	1.04	0.44	0.84	3.81	0.	0.	6.14	1.114	1.	-11	0	
20631	GTRW16	DISTILL	5.	16.28	0.331	0.05	32.7	2.42	1.03	1.44	9.13	0.	-4.64	9.38	1.704	-18.	0	59	
20631	GTR308	DISTILL	5.	1.00	0.062	0.05	13.6	1.00	0.43	0.83	3.84	0.	0.	6.10	1.108	2.	-10	0	
20631	GTR308	DISTILL	5.	12.64	0.282	0.05	26.7	1.98	0.84	1.28	8.16	0.	-3.54	8.72	1.584	-13.	0	57	
20631	GTR312	DISTILL	5.	1.00	0.068	0.05	13.6	1.01	0.43	0.83	3.81	0.	0.	6.08	1.105	2.	-10	0	
20631	GTR312	DISTILL	5.	14.51	0.323	0.05	28.5	2.11	0.90	1.33	8.49	0.	-4.11	8.73	1.585	-14.	0	58	
20631	GTR316	DISTILL	5.	1.00	0.068	0.05	13.8	1.03	0.44	0.84	3.81	0.	0.	6.11	1.110	2.	-11	0	
20631	GTR316	DISTILL	5.	14.30	0.320	0.05	29.4	2.17	0.92	1.35	8.44	0.	-4.04	8.85	1.607	-14.	0	58	
20631	FCPADS	DISTILL	5.	1.00	0.050	0.05	14.6	1.08	0.46	0.92	3.89	0.	0.	6.35	1.154	0.	-14	0	
20631	FCPADS	DISTILL	5.	32.90	0.279	0.05	93.2	6.90	2.93	7.61	17.33	0.	-9.69	25.09	4.555	-96.	0	62	
20631	FCMCDS	DISTILL	5.	1.00	0.067	0.05	14.8	1.10	0.47	0.91	3.82	0.	0.	6.30	1.144	0.	-13	0	
20631	FCMCDS	DISTILL	5.	26.02	0.360	0.05	80.4	5.96	2.53	5.96	12.65	0.	-7.61	19.49	3.539	-72.	0	63	
20821	ONOCGN	COAL-AF	6.	0.	0.	0.24	7.1	0.54	0.23	0.63	1.41	1.53	0.	4.34	1.000	0.	0	0	
20821	STM141	RESIDUA	6.	1.00	0.243	0.24	6.9	0.53	0.22	0.61	3.01	0.	0.	4.37	1.008	-0.	-19	0	
20821	STM141	RESIDUA	6.	1.25	0.277	0.24	6.6	0.50	0.21	0.49	3.16	0.	-0.23	4.13	0.952	1.	999	0	
20821	STM141	COAL-FG	6.	1.00	0.243	0.24	13.6	1.03	0.44	1.07	1.75	0.	0.	4.29	0.990	-3.	5	13	
20821	STM141	COAL-FG	6.	1.25	0.277	0.24	12.3	0.94	0.40	0.86	1.83	0.	-0.23	3.79	0.875	-1.	12	8	
20821	STM141	COAL-AF	6.	1.00	0.243	0.24	11.6	0.88	0.38	0.98	1.75	0.	0.	3.98	0.919	-1.	10	9	
20821	STM141	COAL-AF	6.	1.25	0.277	0.24	9.9	0.75	0.32	0.75	1.83	0.	-0.23	3.42	0.788	2.	24	5	
20821	STM088	RESIDUA	6.	0.99	0.240	0.24	5.9	0.45	0.19	0.46	3.01	0.01	0.	4.12	0.950	1.	999	0	
20821	STM088	COAL-FG	6.	0.99	0.240	0.24	11.4	0.86	0.37	0.82	1.75	0.01	0.	3.80	0.878	-0.	13	7	
20821	STM088	COAL-AF	6.	0.99	0.240	0.24	9.3	0.71	0.30	0.72	1.75	0.01	0.	3.49	0.805	2.	26	4	
20821	PFBSTM	COAL-PF	6.	1.00	0.240	0.24	15.4	1.17	0.50	1.18	1.75	0.	0.	4.60	1.062	-5.	2	21	
20821	PFBSTM	COAL-PF	6.	1.82	0.332	0.24	15.3	1.16	0.50	1.06	2.03	0.	-0.75	4.00	0.922	-3.	8	10	
20821	TISTMT	RESIDUA	6.	1.00	0.239	0.24	19.9	1.51	0.64	0.95	3.02	0.	0.	6.12	1.413	-12.	0	72	
20821	TISTMT	RESIDUA	6.	2.34	0.368	0.24	33.1	2.51	1.07	1.17	3.82	0.	-1.24	7.34	1.694	-22.	0	85	
20821	TISTMT	COAL	6.	1.00	0.239	0.24	28.3	2.15	0.91	1.47	1.76	0.	0.	6.28	1.449	-16.	0	287	
20821	TISTMT	COAL	6.	2.34	0.368	0.24	42.0	3.19	1.36	1.64	2.22	0.	-1.24	7.17	1.653	-26.	0	999	
20821	TIHRSG	RESIDUA	6.	0.87	0.182	0.24	26.1	1.94	0.82	0.88	3.04	0.21	0.	6.88	1.588	-17.	0	71	
20821	TIHRSG	COAL	6.	0.87	0.182	0.24	33.7	2.56	1.09	1.27	1.77	0.21	0.	6.89	1.589	-21.	0	139	
20821	STIRL	DISTILL	6.	1.00	0.205	0.24	7.0	0.52	0.22	0.58	3.88	0.	0.	5.20	1.200	-3.	193	0	
20821	STIRL	DISTILL	6.	2.90	0.341	0.24	10.9	0.81	0.34	0.58	5.58	0.	-1.75	5.56	1.283	-6.	0	58	
20821	STIRL	RESIDUA	6.	1.00	0.205	0.24	7.0	0.52	0.22	0.59	3.16	0.	0.	4.49	1.036	-0.	-44	0	
20821	STIRL	RESIDUA	6.	2.90	0.341	0.24	10.9	0.81	0.34	0.58	4.56	0.	-1.75	4.54	1.046	-2.	0	999	
20821	STIRL	COAL	6.	1.00	0.205	0.24	13.9	1.03	0.44	1.05	1.84	0.	0.	4.36	1.005	-3.	5	14	
20821	STIRL	COAL	6.	2.90	0.341	0.24	18.4	1.36	0.58	1.02	2.65	0.	-1.75	3.86	0.890	-4.	8	10	
20821	HEGT85	COAL-AF	6.	1.00	0.197	0.24	24.2	1.84	0.78	1.21	1.85	0.	0.	5.68	1.311	-12.	0	999	
20821	HEGT85	COAL-AF	6.	3.13	0.337	0.24	40.0	3.03	1.29	1.44	2.80	0.	-1.96	6.60	1.523	-23.	0	999	
20821	HEGT60	COAL-AF	6.	1.00	0.123	0.24	24.0	1.82	0.78	1.22	2.02	0.	0.	5.85	1.348	-13.	0	504	

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK										
20821	HEGT60	COAL-AF	6.	2.84	0.204	0.24	37.2	2.83	1.20	1.41	3.16	0.	-1.70	6.89	1.590	-22.	0	999	
20821	HEGT00	COAL-AF	6.	1.00	0.113	0.24	22.2	1.68	0.72	1.14	2.05	0.	0.	5.59	1.289	-11.	0	999	
20821	HEGT00	COAL-AF	6.	1.42	0.138	0.24	23.6	1.79	0.76	0.99	2.31	0.	-0.38	5.47	1.261	-11.	0	999	
20821	FCMCCL	COAL	6.	1.00	0.209	0.24	21.3	1.66	0.70	1.25	1.83	0.	0.	5.44	1.254	-11.	0	999	
20821	FCMCCL	COAL	6.	2.67	0.338	0.24	28.9	2.24	0.95	1.41	2.52	0.	-1.53	5.59	1.290	-15.	0	999	
20821	FCSTCL	COAL	6.	1.00	0.217	0.24	20.6	1.60	0.68	1.28	1.81	0.	0.	5.37	1.239	-10.	0	999	
20821	FCSTCL	COAL	6.	4.71	0.419	0.24	37.4	2.91	1.24	1.86	3.28	0.	-3.41	5.87	1.355	-20.	0	29	
20821	IGGTST	COAL	6.	1.00	0.178	0.24	20.8	1.62	0.69	1.27	1.90	0.	0.	5.47	1.262	-10.	0	999	
20821	IGGTST	COAL	6.	3.38	0.312	0.24	30.7	2.39	1.02	1.32	3.05	0.	-2.19	5.59	1.290	-16.	0	999	
20821	GTSOAR	RESIDUA	6.	1.00	0.189	0.24	7.6	0.56	0.24	0.57	3.22	0.	0.	4.59	1.059	-1.	0	56	
20821	GTSOAR	RESIDUA	6.	2.66	0.306	0.24	9.9	0.73	0.31	0.50	4.54	0.	-1.53	4.56	1.051	-2.	0	106	
20821	GTAC08	RESIDUA	6.	1.00	0.204	0.24	6.9	0.51	0.22	0.54	3.17	0.	0.	4.43	1.023	-0.	-20	0	
20821	GTAC08	RESIDUA	6.	2.21	0.307	0.24	7.9	0.59	0.25	0.45	4.06	0.	-1.12	4.22	0.974	0.	17	6	
20821	GTAC12	RESIDUA	6.	1.00	0.208	0.24	6.9	0.51	0.22	0.55	3.15	0.	0.	4.43	1.022	-0.	-22	0	
20821	GTAC12	RESIDUA	6.	2.69	0.337	0.24	9.0	0.66	0.28	0.48	4.37	0.	-1.56	4.23	0.977	-0.	9	9	
20821	GTAC16	RESIDUA	6.	1.00	0.207	0.24	7.2	0.53	0.23	0.55	3.15	0.	0.	4.46	1.029	-0.	-67	0	
20821	GTAC16	RESIDUA	6.	3.00	0.350	0.24	10.0	0.74	0.32	0.51	4.60	0.	-1.84	4.32	0.998	-1.	5	13	
20821	GTWC16	RESIDUA	6.	1.00	0.181	0.24	7.5	0.55	0.24	0.56	3.25	0.	0.	4.61	1.063	-1.	0	55	
20821	GTWC16	RESIDUA	6.	3.26	0.315	0.24	10.7	0.79	0.34	0.54	5.12	0.	-2.08	4.70	1.084	-3.	0	78	
20821	CC1626	RESIDUA	6.	1.00	0.183	0.24	7.7	0.58	0.25	0.65	3.25	0.	0.	4.72	1.090	-2.	0	57	
20821	CC1626	RESIDUA	6.	5.85	0.371	0.24	15.6	1.18	0.50	0.81	7.21	0.	-4.47	5.24	1.208	-7.	0	97	
20821	CC1622	RESIDUA	6.	1.00	0.192	0.24	7.4	0.56	0.24	0.64	3.21	0.	0.	4.65	1.073	-1.	0	57	
20821	CC1622	RESIDUA	6.	5.28	0.380	0.24	14.6	1.11	0.47	0.76	6.57	0.	-3.94	4.97	1.147	-6.	0	***	
20821	CC1222	RESIDUA	6.	1.00	0.194	0.24	7.2	0.55	0.23	0.64	3.21	0.	0.	4.62	1.066	-1.	0	56	
20821	CC1222	RESIDUA	6.	5.27	0.383	0.24	14.0	1.06	0.45	0.75	6.52	0.	-3.93	4.85	1.119	-5.	0	999	
20821	CC0822	RESIDUA	6.	1.00	0.207	0.24	7.4	0.56	0.24	0.64	3.15	0.	0.	4.59	1.058	-1.	0	57	
20821	CC0822	RESIDUA	6.	4.26	0.389	0.24	12.1	0.92	0.39	0.69	5.51	0.	-3.00	4.51	1.040	-3.	1	22	
20821	STIG15	RESIDUA	6.	1.00	0.067	0.24	7.7	0.57	0.24	0.62	3.71	0.	0.	5.14	1.186	-3.	0	56	
20821	STIG15	RESIDUA	6.	122.30	0.171	0.24	196.6	14.56	6.19	10.73	158.84	0.	-111.68	78.64	18.140	-322.	0	59	
20821	STIG10	RESIDUA	6.	1.00	0.096	0.24	7.4	0.55	0.23	0.60	3.59	0.	0.	4.97	1.146	-2.	0	56	
20821	STIG10	RESIDUA	6.	11.31	0.218	0.24	22.7	1.68	0.71	1.27	15.58	0.	-9.49	9.76	2.252	-24.	0	59	
20821	STIG1S	RESIDUA	6.	1.00	0.110	0.24	7.2	0.54	0.23	0.60	3.54	0.	0.	4.90	1.130	-2.	999	0	
20821	STIG1S	RESIDUA	6.	6.64	0.228	0.24	15.4	1.14	0.49	0.92	9.80	0.	-5.19	7.15	1.650	-13.	0	59	
20821	DEADV3	RESIDUA	6.	1.00	0.201	0.24	9.4	0.70	0.30	0.64	3.18	0.	0.	4.81	1.110	-3.	0	61	
20821	DEADV3	RESIDUA	6.	4.15	0.374	0.24	17.5	1.30	0.55	0.77	5.54	0.	-2.90	5.25	1.211	-8.	0	163	
20821	DEHTPM	RESIDUA	6.	1.00	0.224	0.24	9.4	0.69	0.29	0.67	3.08	0.	0.	4.74	1.094	-2.	0	64	
20821	DEHTPM	RESIDUA	6.	3.47	0.397	0.24	15.0	1.11	0.47	0.74	4.70	0.	-2.27	4.75	1.097	-5.	0	999	
20821	DESOA3	DISTILL	6.	1.00	0.192	0.24	8.8	0.66	0.28	0.63	3.94	0.	0.	5.50	1.268	-4.	0	57	
20821	DESOA3	DISTILL	6.	4.12	0.358	0.24	21.3	1.58	0.67	0.87	6.92	0.	-2.87	7.16	1.652	-15.	0	63	
20821	DESOA3	RESIDUA	6.	1.00	0.192	0.24	8.8	0.66	0.28	0.63	3.21	0.	0.	4.77	1.101	-2.	0	60	
20821	DESOA3	RESIDUA	6.	4.12	0.358	0.24	21.3	1.58	0.67	0.87	5.65	0.	-2.87	5.89	1.358	-11.	0	86	
20821	GTSO3D	DISTILL	6.	1.00	0.201	0.24	6.7	0.49	0.21	0.54	3.89	0.	0.	5.13	1.184	-2.	-70	0	
20821	GTSO3D	DISTILL	6.	2.56	0.321	0.24	8.0	0.60	0.25	0.45	5.32	0.	-1.44	5.18	1.195	-3.	0	56	
20821	GTRA08	DISTILL	6.	1.00	0.195	0.24	7.9	0.58	0.25	0.57	3.92	0.	0.	5.33	1.229	-3.	0	56	

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK									
20821 GTRA08 DISTILL	6.	3.96	0.358	0.24	13.0	0.96	0.41	0.60	6.72	0.	-2.72	5.97	1.377	-8.	0	59			
20821 GTRA12 DISTILL	6.	1.00	0.197	0.24	7.8	0.58	0.25	0.57	3.91	0.	0.	5.31	1.225	-3.	0	56			
20821 GTRA12 DISTILL	6.	3.92	0.362	0.24	13.1	0.97	0.41	0.60	6.64	0.	-2.69	5.93	1.369	-8.	0	60			
20821 GTRA16 DISTILL	6.	1.00	0.197	0.24	8.1	0.60	0.25	0.58	3.91	0.	0.	5.34	1.232	-4.	0	56			
20821 GTRA16 DISTILL	6.	3.70	0.356	0.24	13.3	0.98	0.42	0.60	6.44	0.	-2.49	5.95	1.372	-8.	0	60			
20821 GTR208 DISTILL	6.	1.00	0.196	0.24	7.5	0.55	0.24	0.56	3.92	0.	0.	5.27	1.215	-3.	0	56			
20821 GTR208 DISTILL	6.	3.12	0.335	0.24	10.5	0.78	0.33	0.53	5.91	0.	-1.95	5.60	1.292	-5.	0	58			
20821 GTR212 DISTILL	6.	1.00	0.194	0.24	7.6	0.57	0.24	0.57	3.93	0.	0.	5.30	1.223	-3.	0	56			
20821 GTR212 DISTILL	6.	3.35	0.340	0.24	11.4	0.84	0.36	0.55	6.16	0.	-2.16	5.75	1.326	-6.	0	58			
20821 GTR216 DISTILL	6.	1.00	0.198	0.24	7.8	0.58	0.24	0.57	3.91	0.	0.	5.30	1.222	-3.	0	56			
20821 GTR216 DISTILL	6.	3.42	0.349	0.24	12.0	0.89	0.38	0.57	6.16	0.	-2.23	5.77	1.330	-7.	0	59			
20821 GTRW08 DISTILL	6.	1.00	0.163	0.24	8.0	0.59	0.25	0.58	4.08	0.	0.	5.51	1.270	-4.	0	56			
20821 GTRW08 DISTILL	6.	4.78	0.314	0.24	14.4	1.06	0.45	0.66	8.23	0.	-3.46	6.94	1.600	-11.	0	58			
20821 GTRW12 DISTILL	6.	1.00	0.171	0.24	8.0	0.59	0.25	0.58	4.04	0.	0.	5.46	1.260	-4.	0	56			
20821 GTRW12 DISTILL	6.	4.91	0.334	0.24	14.6	1.08	0.46	0.66	8.19	0.	-3.60	6.79	1.566	-11.	0	59			
20821 GTRW16 DISTILL	6.	1.00	0.173	0.24	8.2	0.61	0.25	0.58	4.03	0.	0.	5.48	1.264	-4.	0	56			
20821 GTRW16 DISTILL	6.	4.62	0.331	0.24	14.6	1.08	0.46	0.66	7.84	0.	-3.33	6.71	1.549	-11.	0	59			
20821 GTR308 DISTILL	6.	1.00	0.158	0.24	7.6	0.56	0.24	0.57	4.10	0.	0.	5.47	1.263	-4.	0	56			
20821 GTR308 DISTILL	6.	3.58	0.282	0.24	11.5	0.85	0.36	0.57	7.01	0.	-2.38	6.41	1.479	-8.	0	57			
20821 GTR312 DISTILL	6.	1.00	0.174	0.24	7.7	0.57	0.24	0.57	4.03	0.	0.	5.41	1.248	-4.	0	56			
20821 GTR312 DISTILL	6.	4.11	0.323	0.24	12.5	0.92	0.39	0.60	7.30	0.	-2.87	6.34	1.462	-9.	0	58			
20821 GTR316 DISTILL	6.	1.00	0.173	0.24	7.9	0.59	0.25	0.58	4.03	0.	0.	5.44	1.256	-4.	0	56			
20821 GTR316 DISTILL	6.	4.05	0.320	0.24	12.9	0.96	0.41	0.61	7.25	0.	-2.81	6.41	1.479	-9.	0	58			
20821 FCPADS DISTILL	6.	1.00	0.199	0.24	7.6	0.56	0.24	0.92	3.90	0.	0.	5.63	1.298	-4.	0	57			
20821 FCPADS DISTILL	6.	4.43	0.378	0.24	16.7	1.24	0.53	2.52	7.06	0.	-3.15	8.19	1.889	-17.	0	61			
20821 FCMCDS DISTILL	6.	1.00	0.170	0.24	8.2	0.61	0.26	0.91	4.05	0.	0.	5.82	1.343	-5.	0	57			
20821 FCMCDS DISTILL	6.	7.38	0.360	0.24	29.3	2.17	0.92	3.91	10.86	0.	-5.87	11.99	2.765	-35.	0	61			
22601 ONOCGN COAL-FG	6.	0.	0.	0.13	13.5	1.02	0.43	0.87	2.45	1.49	0.	6.27	1.000	0.	0	0			
22601 STM141 RESIDUA	6.	1.00	0.164	0.13	9.1	0.69	0.29	0.76	4.78	0.	0.	6.53	1.042	1.	-9	0			
22601 STM141 RESIDUA	6.	1.61	0.227	0.13	8.8	0.67	0.28	0.60	5.13	0.	-0.54	6.13	0.979	3.	-2	0			
22601 STM141 COAL-FG	6.	1.00	0.164	0.13	19.3	1.47	0.62	1.40	2.78	0.	0.	6.27	1.001	-3.	5	14			
22601 STM141 COAL-FG	6.	1.61	0.227	0.13	17.4	1.32	0.56	1.11	2.98	0.	-0.54	5.42	0.866	1.	18	6			
22601 STM141 COAL-AF	6.	1.00	0.164	0.13	16.7	1.27	0.54	1.29	2.78	0.	0.	5.87	0.937	-0.	13	7			
22601 STM141 COAL-AF	6.	1.61	0.227	0.13	13.2	1.00	0.43	0.97	2.98	0.	-0.54	4.83	0.770	5.	999	0			
22601 STM088 RESIDUA	6.	1.00	0.164	0.13	8.4	0.64	0.27	0.72	4.78	0.	0.	6.41	1.024	2.	-7	0			
22601 STM088 RESIDUA	6.	1.18	0.184	0.13	7.8	0.59	0.25	0.57	4.89	0.	-0.16	6.13	0.979	3.	-3	0			
22601 STM088 COAL-FG	6.	1.00	0.164	0.13	18.0	1.37	0.58	1.32	2.78	0.	0.	6.04	0.965	-2.	8	10			
22601 STM088 COAL-FG	6.	1.18	0.184	0.13	16.0	1.21	0.52	1.05	2.84	0.	-0.16	5.46	0.872	1.	23	5			
22601 STM088 COAL-AF	6.	1.00	0.164	0.13	15.0	1.14	0.48	1.21	2.78	0.	0.	5.60	0.895	1.	28	4			
22601 STM088 COAL-AF	6.	1.18	0.184	0.13	12.4	0.94	0.40	0.93	2.84	0.	-0.16	4.95	0.791	5.	999	0			
22601 PFBSTM COAL-PF	6.	1.00	0.160	0.13	20.6	1.56	0.67	1.48	2.79	0.	0.	6.50	1.037	-4.	2	21			
22601 PFBSTM COAL-PF	6.	2.57	0.292	0.13	21.3	1.62	0.69	1.45	3.32	0.	-1.41	5.67	0.905	-2.	10	9			
22601 TISTMT RESIDUA	6.	1.00	0.161	0.13	23.2	1.76	0.75	1.11	4.80	0.	0.	8.42	1.344	-11.	0	62			
22601 TISTMT RESIDUA	6.	3.42	0.337	0.13	48.8	3.71	1.58	1.63	6.21	0.	-2.17	10.95	1.748	-32.	0	74			

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	/HEAT COST															
		MW	REQD	RATIO *10**6		INSNC ,		ELEC				WORTH	PAY						
												15%	BACK						
22601 TISTMT	COAL	6.	1.00	0.161	0.13	34.8	2.64	1.12	1.78	2.79	0.	0.	8.33	1.330	-17.	0	167		
22601 TISTMT	COAL	6.	3.42	0.337	0.13	62.0	4.71	2.00	2.27	3.60	0.	-2.17	10.42	1.663	-36.	0	999		
22601 TIHRSG	RESIDUA	6.	1.00	0.125	0.13	32.0	2.37	1.01	1.24	5.01	0.	0.	9.62	1.536	-19.	0	64		
22601 TIHRSG	RESIDUA	6.	1.61	0.173	0.13	42.2	3.12	1.33	1.34	5.49	0.	-0.54	10.73	1.712	-27.	0	67		
22601 TIHRSG	COAL	6.	1.00	0.125	0.13	44.6	3.39	1.44	1.93	2.91	0.	0.	9.67	1.543	-26.	0	97		
22601 TIHRSG	COAL	6.	1.61	0.173	0.13	54.2	4.11	1.75	1.93	3.19	0.	-0.54	10.43	1.665	-33.	0	109		
22601 STIRL	DISTILL	6.	1.00	0.117	0.13	10.0	0.74	0.32	0.73	6.19	0.	0.	7.98	1.273	-4.	-30	0		
22601 STIRL	DISTILL	6.	4.09	0.265	0.13	18.4	1.36	0.58	0.84	9.33	0.	-2.76	9.36	1.494	-12.	0	57		
22601 STIRL	RESIDUA	6.	1.00	0.117	0.13	10.0	0.74	0.32	0.73	5.05	0.	0.	6.84	1.092	-0.	-15	0		
22601 STIRL	RESIDUA	6.	4.09	0.265	0.13	18.4	1.37	0.58	0.84	7.61	0.	-2.76	7.64	1.220	-6.	0	59		
22601 STIRL	COAL	6.	1.00	0.117	0.13	19.9	1.47	0.63	1.35	2.93	0.	0.	6.38	1.019	-3.	3	17		
22601 STIRL	COAL	6.	4.09	0.265	0.13	32.5	2.41	1.02	1.54	4.42	0.	-2.76	6.63	1.059	-10.	3	17		
22601 HEGT85	COAL-AF	6.	1.00	0.049	0.13	29.8	2.26	0.96	1.50	3.16	0.	0.	7.89	1.259	-13.	0	136		
22601 HEGT85	COAL-AF	6.	15.45	0.157	0.13	126.2	9.58	4.07	4.42	13.42	0.	-12.91	18.57	2.964	-93.	0	96		
22601 HEGT60	COAL-AF	6.	1.00	0.058	0.13	29.0	2.20	0.94	1.49	3.13	0.	0.	7.75	1.238	-12.	0	172		
22601 HEGT60	COAL-AF	6.	6.17	0.151	0.13	65.5	4.97	2.11	2.41	6.64	0.	-4.62	11.51	1.837	-41.	0	118		
22601 HEGT00	COAL-AF	6.	1.00	0.063	0.13	27.7	2.10	0.89	1.46	3.11	0.	0.	7.57	1.208	-11.	0	322		
22601 HEGT00	COAL-AF	6.	2.66	0.116	0.13	37.5	2.84	1.21	1.51	4.21	0.	-1.48	8.29	1.324	-18.	0	999		
22601 FCMCCL	COAL	6.	1.00	0.140	0.13	27.0	2.10	0.89	1.52	2.86	0.	0.	7.37	1.176	-10.	0	999		
22601 FCMCCL	COAL	6.	4.79	0.337	0.13	44.7	3.47	1.48	2.15	4.39	0.	-3.39	8.11	1.294	-21.	0	999		
22601 FCSTCL	COAL	6.	1.00	0.146	0.13	26.3	2.04	0.87	1.55	2.84	0.	0.	7.30	1.166	-10.	0	999		
22601 FCSTCL	COAL	6.	7.39	0.402	0.13	54.4	4.23	1.80	2.67	5.32	0.	-5.71	8.30	1.326	-27.	0	29		
22601 IGGTST	COAL	6.	1.00	0.116	0.13	26.3	2.04	0.87	1.54	2.94	0.	0.	7.39	1.180	-10.	0	999		
22601 IGGTST	COAL	6.	5.16	0.286	0.13	43.5	3.38	1.44	1.74	4.96	0.	-3.71	7.81	1.246	-20.	0	30		
22601 GTSOAR	RESIDUA	6.	1.00	0.120	0.13	9.8	0.72	0.31	0.68	5.04	0.	0.	6.75	1.077	0.	-13	0		
22601 GTSOAR	RESIDUA	6.	5.02	0.293	0.13	15.9	1.17	0.50	0.72	8.31	0.	-3.59	7.12	1.136	-4.	0	57		
22601 GTAC08	RESIDUA	6.	1.00	0.139	0.13	9.1	0.67	0.29	0.66	4.92	0.	0.	6.54	1.045	1.	-9	0		
22601 GTAC08	RESIDUA	6.	3.93	0.309	0.13	12.3	0.91	0.39	0.62	6.98	0.	-2.61	6.29	1.003	1.	-6	0		
22601 GTAC12	RESIDUA	6.	1.00	0.138	0.13	9.1	0.67	0.29	0.66	4.93	0.	0.	6.55	1.046	1.	-9	0		
22601 GTAC12	RESIDUA	6.	4.90	0.334	0.13	14.4	1.07	0.45	0.68	7.71	0.	-3.48	6.42	1.026	-1.	0	55		
22601 GTAC16	RESIDUA	6.	1.00	0.136	0.13	9.3	0.69	0.29	0.67	4.94	0.	0.	6.59	1.052	1.	-10	0		
22601 GTAC16	RESIDUA	6.	5.54	0.343	0.13	16.4	1.21	0.51	0.73	8.23	0.	-4.06	6.64	1.060	-2.	0	64		
22601 GTWC16	RESIDUA	6.	1.00	0.123	0.13	9.6	0.71	0.30	0.68	5.02	0.	0.	6.71	1.071	1.	-12	0		
22601 GTWC16	RESIDUA	6.	5.82	0.315	0.13	16.5	1.22	0.52	0.75	8.87	0.	-4.30	7.05	1.125	-4.	0	59		
22601 CC1626	RESIDUA	6.	1.00	0.122	0.13	9.7	0.73	0.31	0.76	5.03	0.	0.	6.83	1.089	0.	-14	0		
22601 CC1626	RESIDUA	6.	9.29	0.356	0.13	22.4	1.70	0.72	1.05	11.71	0.	-7.41	7.77	1.240	-9.	0	66		
22601 CC1622	RESIDUA	6.	1.00	0.127	0.13	9.4	0.71	0.30	0.75	4.99	0.	0.	6.76	1.078	0.	-13	0		
22601 CC1622	RESIDUA	6.	8.36	0.364	0.13	21.6	1.64	0.70	1.01	10.67	0.	-6.58	7.44	1.187	-8.	0	70		
22601 CC1222	RESIDUA	6.	1.00	0.129	0.13	9.2	0.70	0.30	0.74	4.98	0.	0.	6.72	1.073	1.	-12	0		
22601 CC1222	RESIDUA	6.	8.33	0.367	0.13	20.5	1.55	0.66	0.99	10.59	0.	-6.55	7.25	1.156	-6.	0	71		
22601 CC0822	RESIDUA	6.	1.00	0.138	0.13	9.4	0.71	0.30	0.75	4.93	0.	0.	6.70	1.069	1.	-12	0		
22601 CC0822	RESIDUA	6.	6.64	0.369	0.13	17.4	1.32	0.56	0.89	8.95	0.	-5.04	6.68	1.066	-3.	0	90		
22601 STIG15	RESIDUA	6.	1.00	0.045	0.13	9.6	0.71	0.30	0.72	5.46	0.	0.	7.20	1.149	-1.	-18	0		
22601 STIG15	RESIDUA	6.	218.90	0.171	0.13	345.3	25.57	10.87	18.28	275.90	0.	-194.69	135.93	21.697	-563.	0	59		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC									WORTH 15%	%	PAY BACK			
22601 STIG10 RESIDUA	6.	1.00	0.065	0.13	9.3	0.69	0.29	0.70	5.35	0.	0.	7.03	1.122	-0.	-16	0			
22601 STIG10 RESIDUA	6.	20.24	0.218	0.13	39.8	2.95	1.25	2.02	27.07	0.	-17.19	16.10	2.570	-43.	0	59			
22601 STIG1S RESIDUA	6.	1.00	0.074	0.13	9.2	0.68	0.29	0.70	5.30	0.	0.	6.97	1.112	-0.	-15	0			
22601 STIG1S RESIDUA	6.	11.88	0.228	0.13	24.2	1.79	0.76	1.35	17.01	0.	-9.72	11.22	1.790	-20.	0	58			
22601 DEADV3 RESIDUA	6.	1.00	0.093	0.13	12.1	0.90	0.38	0.77	5.19	0.	0.	7.24	1.155	-2.	-35	0			
22601 DEADV3 RESIDUA	6.	12.85	0.292	0.13	53.4	3.95	1.68	1.84	16.64	0.	-10.59	13.52	2.158	-41.	0	64			
22601 DEHTPM RESIDUA	6.	1.00	0.139	0.13	12.2	0.90	0.38	0.81	4.93	0.	0.	7.02	1.120	-2.	-30	0			
22601 DEHTPM RESIDUA	6.	5.85	0.358	0.13	28.0	2.07	0.88	1.16	8.35	0.	-4.33	8.13	1.297	-12.	0	73			
22601 DESOA3 DISTILL	6.	1.00	0.079	0.13	11.6	0.86	0.37	0.76	6.45	0.	0.	8.45	1.348	-6.	-55	0			
22601 DESOA3 DISTILL	6.	14.85	0.255	0.13	75.9	5.62	2.39	2.43	24.22	0.	-12.38	22.28	3.556	-79.	0	61			
22601 DESOA3 RESIDUA	6.	1.00	0.079	0.13	11.6	0.86	0.37	0.76	5.27	0.	0.	7.26	1.158	-2.	-30	0			
22601 DESOA3 RESIDUA	6.	14.85	0.255	0.13	75.9	5.62	2.39	2.43	19.76	0.	-12.38	17.82	2.844	-65.	0	64			
22601 GTSOAD DISTILL	6.	1.00	0.132	0.13	8.8	0.65	0.28	0.66	6.09	0.	0.	7.68	1.226	-2.	-21	0			
22601 GTSOAD DISTILL	6.	4.71	0.314	0.13	12.8	0.95	0.40	0.64	9.49	0.	-3.31	8.17	1.305	-5.	-97	0			
22601 GTRA08 DISTILL	6.	1.00	0.123	0.13	10.0	0.74	0.31	0.68	6.15	0.	0.	7.89	1.259	-3.	-28	0			
22601 GTRA08 DISTILL	6.	7.70	0.343	0.13	21.4	1.58	0.67	0.89	12.69	0.	-5.98	9.85	1.573	-15.	0	58			
22601 GTRA12 DISTILL	6.	1.00	0.126	0.13	9.9	0.74	0.31	0.68	6.13	0.	0.	7.86	1.254	-3.	-28	0			
22601 GTRA12 DISTILL	6.	7.54	0.349	0.13	21.5	1.60	0.68	0.89	12.39	0.	-5.84	9.72	1.551	-14.	0	58			
22601 GTRA16 DISTILL	6.	1.00	0.126	0.13	10.0	0.75	0.32	0.69	6.13	0.	0.	7.89	1.259	-3.	-29	0			
22601 GTRA16 DISTILL	6.	7.05	0.345	0.13	21.7	1.61	0.68	0.89	11.89	0.	-5.40	9.67	1.543	-14.	0	58			
22601 GTR208 DISTILL	6.	1.00	0.126	0.13	9.6	0.71	0.30	0.68	6.13	0.	0.	7.82	1.248	-3.	-26	0			
22601 GTR208 DISTILL	6.	5.86	0.324	0.13	17.1	1.26	0.54	0.76	10.77	0.	-4.34	8.99	1.436	-10.	0	56			
22601 GTR212 DISTILL	6.	1.00	0.125	0.13	9.8	0.72	0.31	0.68	6.13	0.	0.	7.84	1.252	-3.	-27	0			
22601 GTR212 DISTILL	6.	6.28	0.330	0.13	18.4	1.36	0.58	0.80	11.21	0.	-4.72	9.23	1.473	-11.	0	57			
22601 GTR216 DISTILL	6.	1.00	0.128	0.13	9.9	0.73	0.31	0.68	6.12	0.	0.	7.84	1.252	-3.	-27	0			
22601 GTR216 DISTILL	6.	6.44	0.339	0.13	19.6	1.45	0.62	0.83	11.24	0.	-4.86	9.28	1.481	-12.	0	57			
22601 GTRW08 DISTILL	6.	1.00	0.103	0.13	10.1	0.75	0.32	0.69	6.29	0.	0.	8.04	1.283	-4.	-31	0			
22601 GTRW08 DISTILL	6.	9.20	0.302	0.13	23.2	1.72	0.73	0.96	15.43	0.	-7.33	11.51	1.837	-21.	0	57			
22601 GTRW12 DISTILL	6.	1.00	0.110	0.13	10.1	0.75	0.32	0.69	6.24	0.	0.	7.99	1.275	-4.	-30	0			
22601 GTRW12 DISTILL	6.	9.38	0.324	0.13	23.4	1.73	0.74	0.96	15.17	0.	-7.49	11.11	1.774	-20.	0	58			
22601 GTRW16 DISTILL	6.	1.00	0.112	0.13	10.3	0.76	0.32	0.69	6.23	0.	0.	8.00	1.278	-4.	-32	0			
22601 GTRW16 DISTILL	6.	8.72	0.322	0.13	23.2	1.72	0.73	0.95	14.38	0.	-6.90	10.88	1.737	-19.	0	58			
22601 GTR308 DISTILL	6.	1.00	0.096	0.13	9.7	0.72	0.30	0.68	6.34	0.	0.	8.04	1.283	-4.	-29	0			
22601 GTR308 DISTILL	6.	7.03	0.263	0.13	18.9	1.40	0.59	0.83	13.35	0.	-5.39	10.78	1.721	-16.	0	57			
22601 GTR312 DISTILL	6.	1.00	0.114	0.13	9.8	0.72	0.31	0.68	6.22	0.	0.	7.93	1.265	-3.	-28	0			
22601 GTR312 DISTILL	6.	7.63	0.316	0.13	19.7	1.46	0.62	0.85	13.13	0.	-5.92	10.13	1.618	-15.	0	57			
22601 GTR316 DISTILL	6.	1.00	0.113	0.13	10.0	0.74	0.32	0.69	6.22	0.	0.	7.96	1.271	-4.	-29	0			
22601 GTR316 DISTILL	6.	7.51	0.313	0.13	20.3	1.51	0.64	0.87	13.05	0.	-5.82	10.24	1.634	-15.	0	57			
22601 FCPADS DISTILL	6.	1.00	0.086	0.13	10.3	0.77	0.33	1.04	6.41	0.	0.	8.54	1.364	-6.	-40	0			
22601 FCPADS DISTILL	6.	16.70	0.279	0.13	61.2	4.53	1.93	8.93	25.86	0.	-14.02	27.23	4.347	-89.	0	60			
22601 FCMCDS DISTILL	6.	1.00	0.114	0.13	10.6	0.78	0.33	1.01	6.21	0.	0.	8.34	1.331	-5.	-39	0			
22601 FCMCDS DISTILL	6.	13.21	0.360	0.13	52.6	3.89	1.65	6.75	18.87	0.	-10.91	20.26	3.234	-63.	0	61			
24211 ONOCGN RESIDUA	2.	0.	0.	0.17	1.8	0.13	0.06	0.21	0.	0.23	0.	0.63	1.000	0.	0	0			
24211 STM141 RESIDUA	2.	1.00	0.991	0.17	3.3	0.25	0.11	0.38	0.00	0.	0.	0.74	1.176	-1.	0	999			

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SENSITIVITY OF CAPITAL COST														PERCENT OF ORIGINAL COST 100			
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																	
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL REQD	GEN/ REQD	/HEAT COST	INSNC			ELEC				WORTH	%	PAY				
	MW		RATIO *10**6								15%		BACK				
24211 STM141 RESIDUA	2.	1.14	0.947	0.17	3.1	0.23	0.10	0.30	0.01	0.	-0.02	0.63	1.005	-1.	5	14	
24211 STM141 COAL-FG	2.	1.00	0.991	0.17	6.1	0.46	0.20	0.62	0.00	0.	0.	1.29	2.045	-4.	0	77	
24211 STM141 COAL-FG	2.	1.14	0.947	0.17	5.5	0.41	0.18	0.49	0.01	0.	-0.02	1.07	1.701	-3.	0	98	
24211 STM141 COAL-AF	2.	1.00	0.991	0.17	5.5	0.42	0.18	0.56	0.00	0.	0.	1.16	1.847	-4.	0	81	
24211 STM141 COAL-AF	2.	1.14	0.947	0.17	4.8	0.36	0.15	0.42	0.01	0.	-0.02	0.93	1.478	-2.	0	212	
24211 STM088 RESIDUA	2.	0.81	0.810	0.17	2.6	0.20	0.08	0.29	0.	0.04	0.	0.62	0.982	-0.	6	12	
24211 STM088 COAL-FG	2.	0.81	0.810	0.17	5.0	0.38	0.16	0.47	0.	0.04	0.	1.05	1.675	-3.	0	85	
24211 STM088 COAL-AF	2.	0.81	0.810	0.17	4.5	0.34	0.14	0.41	0.	0.04	0.	0.94	1.492	-2.	0	107	
24211 PFBSTM COAL-PF	2.	1.00	0.977	0.17	7.5	0.57	0.24	0.67	0.00	0.	0.	1.48	2.360	-5.	0	76	
24211 PFBSTM COAL-PF	2.	1.89	0.804	0.17	7.3	0.55	0.23	0.53	0.05	0.	-0.12	1.24	1.970	-5.	0	106	
24211 TISTMT RESIDUA	2.	1.00	0.257	0.17	8.4	0.63	0.27	0.53	0.29	0.	0.	1.73	2.749	-7.	0	68	
24211 TISTMT COAL	2.	1.00	0.981	0.17	12.2	0.93	0.39	0.81	0.00	0.	0.	2.13	3.396	-10.	0	75	
24211 TISTMT COAL	2.	2.53	0.758	0.17	18.1	1.37	0.58	0.83	0.08	0.	-0.21	2.65	4.217	-14.	0	82	
24211 TIHRSG RESIDUA	2.	1.00	1.274	0.17	11.0	0.82	0.35	0.52	0.53	0.	0.	2.21	3.519	-9.	0	66	
24211 TIHRSG COAL	2.	1.00	0.833	0.17	15.0	1.14	0.48	0.78	0.02	0.	0.	2.43	3.871	-12.	0	76	
24211 TIHRSG COAL	2.	1.27	0.755	0.17	16.0	1.22	0.52	0.67	0.04	0.	-0.04	2.41	3.841	-12.	0	80	
24211 STIRL DISTILL	2.	1.00	0.255	0.17	2.9	0.22	0.09	0.35	0.36	0.	0.	1.02	1.623	-2.	0	61	
24211 STIRL RESIDUA	2.	1.00	0.255	0.17	2.9	0.22	0.09	0.35	0.29	0.	0.	0.95	1.518	-2.	0	62	
24211 STIRL COAL	2.	1.00	0.813	0.17	6.3	0.47	0.20	0.61	0.03	0.	0.	1.30	2.075	-4.	0	75	
24211 STIRL COAL	2.	3.15	0.562	0.17	6.7	0.50	0.21	0.50	0.19	0.	-0.30	1.10	1.743	-4.	0	208	
24211 HEGT85 COAL-AF	2.	1.00	0.532	0.17	10.7	0.81	0.34	0.66	0.06	0.	0.	1.87	2.979	-8.	0	75	
24211 HEGT85 COAL-AF	2.	13.66	0.192	0.17	42.3	3.21	1.37	1.46	1.49	0.	-1.75	5.77	9.190	-36.	0	78	
24211 HEGT60 COAL-AF	2.	1.00	0.572	0.17	10.3	0.78	0.33	0.65	0.06	0.	0.	1.82	2.898	-8.	0	76	
24211 HEGT60 COAL-AF	2.	5.01	0.278	0.17	20.8	1.58	0.67	0.79	0.49	0.	-0.56	2.98	4.738	-17.	0	81	
24211 HEGT00 COAL-AF	2.	1.00	0.601	0.17	9.7	0.73	0.31	0.62	0.05	0.	0.	1.72	2.733	-7.	0	76	
24211 HEGT00 COAL-AF	2.	2.10	0.408	0.17	11.7	0.88	0.38	0.51	0.17	0.	-0.15	1.79	2.842	-8.	0	86	
24211 FCMCCL COAL	2.	1.00	1.673	0.17	9.3	0.72	0.31	0.64	0.36	0.	0.	2.03	3.238	-8.	0	67	
24211 FCMCCL COAL	2.	3.76	0.053	0.17	13.8	1.07	0.45	0.65	0.54	0.	-0.38	2.33	3.703	-11.	0	74	
24211 FCSTCL COAL	2.	1.00	1.653	0.17	9.1	0.71	0.30	0.69	0.36	0.	0.	2.06	3.276	-8.	0	66	
24211 FCSTCL COAL	2.	5.60	0.159	0.17	16.5	1.28	0.54	0.83	0.64	0.	-0.64	2.65	4.218	-14.	0	76	
24211 IGGTST COAL	2.	1.00	1.770	0.17	9.6	0.75	0.32	0.75	0.37	0.	0.	2.19	3.478	-9.	0	66	
24211 IGGTST COAL	2.	3.87	0.133	0.17	14.2	1.11	0.47	0.75	0.59	0.	-0.40	2.52	4.014	-12.	0	72	
24211 GTSOAR RESIDUA	2.	1.00	0.103	0.17	3.4	0.25	0.11	0.34	0.26	0.	0.	0.96	1.526	-2.	0	65	
24211 GTAC08 RESIDUA	2.	1.00	0.185	0.17	3.1	0.23	0.10	0.33	0.28	0.	0.	0.93	1.486	-2.	0	63	
24211 GTAC12 RESIDUA	2.	1.00	0.049	0.17	3.1	0.23	0.10	0.33	0.24	0.	0.	0.90	1.431	-1.	0	65	
24211 GTAC16 RESIDUA	2.	1.00	0.009	0.17	3.1	0.23	0.10	0.33	0.23	0.	0.	0.89	1.422	-1.	0	66	
24211 GTWC16 RESIDUA	2.	1.00	0.016	0.17	3.3	0.25	0.10	0.34	0.24	0.	0.	0.93	1.476	-2.	0	66	
24211 CC1626 RESIDUA	2.	1.00	0.148	0.17	3.4	0.26	0.11	0.40	0.20	0.	0.	0.97	1.539	-2.	0	67	
24211 CC1622 RESIDUA	2.	1.00	0.136	0.17	3.2	0.25	0.10	0.40	0.20	0.	0.	0.95	1.510	-2.	0	66	
24211 CC1222 RESIDUA	2.	1.00	0.139	0.17	3.2	0.24	0.10	0.39	0.20	0.	0.	0.94	1.491	-2.	0	66	
24211 CC0822 RESIDUA	2.	1.00	0.083	0.17	3.3	0.25	0.11	0.40	0.21	0.	0.	0.97	1.540	-2.	0	66	
24211 STIG15 RESIDUA	2.	1.00	0.160	0.17	3.5	0.26	0.11	0.35	0.20	0.	0.	0.91	1.454	-2.	0	69	
24211 STIG10 RESIDUA	2.	1.00	0.109	0.17	3.3	0.25	0.10	0.35	0.21	0.	0.	0.91	1.441	-2.	0	68	
24211 STIG15 RESIDUA	2.	1.00	0.045	0.17	3.3	0.24	0.10	0.35	0.22	0.	0.	0.91	1.455	-2.	0	67	

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ORIGINAL PAGE IS
OF POOR QUALITY

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES	GANDM FUEL	PURCHD REVNUE TOTAL	NORML	PRESNT	ROI	GROSS
SYSTEM	FUEL	REQD GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK
24211 DEADV3 RESIDUA	2.	1.00 0.137 0.17	4.5	0.33 0.14 0.39	0.20 0. 0.	1.06 1.688	-3.	0 70
24211 DEHTPM RESIDUA	2.	1.00 0.036 0.17	4.5	0.33 0.14 0.41	0.22 0. 0.	1.11 1.764	-3.	0 68
24211 DES0A3 DISTILL	2.	1.00 0.114 0.17	3.4	0.25 0.11 0.36	0.25 0. 0.	0.98 1.554	-2.	0 65
24211 DES0A3 RESIDUA	2.	1.00 0.114 0.17	3.4	0.25 0.11 0.36	0.21 0. 0.	0.93 1.480	-2.	0 68
24211 GTSQAD DISTILL	2.	1.00-0.096 0.17	3.0	0.22 0.09 0.33	0.31 0. 0.	0.96 1.528	-2.	0 62
24211 GTRA08 DISTILL	2.	1.00 0.104 0.17	3.5	0.26 0.11 0.34	0.26 0. 0.	0.97 1.544	-2.	0 66
24211 GTRA12 DISTILL	2.	1.00 0.106 0.17	3.4	0.25 0.11 0.34	0.26 0. 0.	0.96 1.524	-2.	0 65
24211 GTRA16 DISTILL	2.	1.00 0.083 0.17	3.5	0.26 0.11 0.34	0.26 0. 0.	0.98 1.555	-2.	0 65
24211 GTR208 DISTILL	2.	1.00 0.000 0.17	3.3	0.25 0.10 0.34	0.29 0. 0.	0.98 1.553	-2.	0 64
24211 GTR212 DISTILL	2.	1.00 0.030 0.17	3.4	0.25 0.11 0.34	0.28 0. 0.	0.97 1.551	-2.	0 64
24211 GTR216 DISTILL	2.	1.00 0.050 0.17	3.4	0.25 0.11 0.34	0.27 0. 0.	0.97 1.546	-2.	0 65
24211 GTRW08 DISTILL	2.	1.00 0.088 0.17	3.6	0.27 0.11 0.35	0.26 0. 0.	0.98 1.566	-2.	0 65
24211 GTRW12 DISTILL	2.	1.00 0.121 0.17	3.6	0.26 0.11 0.35	0.25 0. 0.	0.97 1.549	-2.	0 66
24211 GTRW16 DISTILL	2.	1.00 0.104 0.17	3.7	0.27 0.12 0.35	0.26 0. 0.	0.99 1.574	-2.	0 66
24211 GTR308 DISTILL	2.	1.00-0.032 0.17	3.4	0.25 0.11 0.34	0.29 0. 0.	0.99 1.580	-2.	0 63
24211 GTR312 DISTILL	2.	1.00 0.064 0.17	3.5	0.26 0.11 0.34	0.27 0. 0.	0.97 1.550	-2.	0 65
24211 GTR316 DISTILL	2.	1.00 0.056 0.17	3.5	0.26 0.11 0.34	0.27 0. 0.	0.99 1.573	-2.	0 65
24211 FCPADS DISTILL	2.	1.00 0.158 0.17	3.2	0.23 0.10 0.35	0.24 0. 0.	0.93 1.478	-2.	0 65
24211 FCMCDS DISTILL	2.	1.00 0.223 0.17	3.2	0.24 0.10 0.35	0.22 0. 0.	0.91 1.445	-2.	0 67
24361 ONOCGN COAL-AF	3.	0. 0. 0.14	6.5	0.50 0.21 0.58	0. 0.69 0.	1.98 1.000	0.	0 0
24361 STM141 RESIDUA	3.	1.00 0.991 0.14	5.3	0.40 0.17 0.51	0.01 0. 0.	1.09 0.551	3.	999 0
24361 STM141 RESIDUA	3.	1.06 0.970 0.14	5.0	0.38 0.16 0.42	0.02 0. -0.02	0.96 0.485	4.	999 0
24361 STM141 COAL-FG	3.	1.00 0.991 0.14	10.5	0.80 0.34 0.88	0.00 0. 0.	2.03 1.023	-2.	4 15
24361 STM141 COAL-FG	3.	1.06 0.970 0.14	9.7	0.73 0.31 0.73	0.01 0. -0.02	1.77 0.893	-1.	10 9
24361 STM141 COAL-AF	3.	1.00 0.991 0.14	8.7	0.66 0.28 0.79	0.00 0. 0.	1.74 0.878	-0.	12 8
24361 STM141 COAL-AF	3.	1.06 0.970 0.14	7.8	0.59 0.25 0.64	0.01 0. -0.02	1.47 0.741	1.	27 4
24361 STM088 RESIDUA	3.	0.68 0.677 0.14	4.3	0.33 0.14 0.40	0. 0.22 0.	1.09 0.552	4.	999 0
24361 STM088 COAL-FG	3.	0.68 0.677 0.14	8.8	0.67 0.29 0.70	0. 0.22 0.	1.88 0.950	-1.	8 10
24361 STM088 COAL-AF	3.	0.68 0.677 0.14	7.3	0.55 0.24 0.61	0. 0.22 0.	1.63 0.822	1.	30 4
24361 PFBSTM COAL-PF	3.	1.00 0.970 0.14	12.9	0.98 0.42 1.03	0.01 0. 0.	2.44 1.231	-5.	0 999
24361 PFBSTM COAL-PF	3.	1.97 0.789 0.14	12.4	0.94 0.40 0.88	0.17 0. -0.40	1.99 1.003	-3.	5 14
24361 TISTMT RESIDUA	3.	1.00-0.398 0.14	14.8	1.13 0.48 0.79	0.98 0. 0.	3.37 1.703	-8.	0 67
24361 TISTMT COAL	3.	1.00 0.980 0.14	21.9	1.66 0.71 1.24	0.01 0. 0.	3.62 1.826	-13.	0 108
24361 TISTMT COAL	3.	2.73 0.747 0.14	34.0	2.58 1.10 1.37	0.28 0. -0.72	4.61 2.327	-21.	0 149
24361 TIHRSG RESIDUA	3.	1.00-1.274 0.14	18.9	1.40 0.59 0.81	1.59 0. 0.	4.39 2.219	-13.	0 63
24361 TIHRSG COAL	3.	1.00 0.784 0.14	26.5	2.01 0.85 1.27	0.09 0. 0.	4.22 2.131	-17.	0 92
24361 TIHRSG COAL	3.	1.63 0.641 0.14	32.1	2.44 1.04 1.21	0.24 0. -0.26	4.66 2.353	-21.	0 132
24361 STIRL DISTILL	3.	1.00-0.322 0.14	5.6	0.42 0.18 0.52	1.13 0. 0.	2.24 1.133	-0.	-20 0
24361 STIRL RESIDUA	3.	1.00-0.322 0.14	5.6	0.42 0.18 0.52	0.92 0. 0.	2.03 1.028	0.	-9 0
24361 STIRL COAL	3.	1.00 0.803 0.14	11.7	0.87 0.37 0.93	0.08 0. 0.	2.24 1.133	-3.	0 999
24361 STIRL COAL	3.	3.64 0.536 0.14	15.4	1.14 0.49 0.89	0.68 0. -1.10	2.10 1.058	-4.	4 16
24361 HEGT60 COAL-AF	3.	1.00 0.496 0.14	17.8	1.35 0.57 1.00	0.20 0. 0.	3.13 1.581	-9.	0 119
24361 HEGT60 COAL-AF	3.	7.59 0.176 0.14	45.4	3.44 1.46 1.68	2.53 0. -2.74	6.38 3.223	-32.	0 89
24361 HEGT00 COAL-AF	3.	1.00 0.575 0.14	16.6	1.28 0.54 0.97	0.17 0. 0.	2.97 1.498	-8.	0 169

HONEYWELL PAGE PRINTING SYSTEM- P1188-02

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS							
SYSTEM	FUEL	REQD	GEN/	HEAT COST									WORTH	%	PAY				
		MW	REQD	RATIO *10**6	INSNC	ELEC							15%		BACK				
24361	HEGT00 COAL-AF	3.	2.69	0.344	0.14	22.6	1.72	0.73	0.94	0.72	0.	-0.70	3.40	1.717	-12.	0	319		
24361	FCMCCL COAL	3.	1.00-2.226	0.14	16.3	1.26	0.54	1.01	1.31	0.	0.	0.	4.12	2.079	-12.	0	63		
24361	FCMCCL COAL	3.	4.72-0.053	0.14	26.3	2.05	0.87	1.26	2.01	0.	-1.54	4.64	2.344	-18.	0	77			
24361	FCSTCL COAL	3.	1.00-2.208	0.14	16.0	1.24	0.53	1.06	1.30	0.	0.	4.13	2.085	-11.	0	63			
24361	FCSTCL COAL	3.	6.42 0.121	0.14	30.3	2.35	1.00	1.51	2.29	0.	-2.25	4.90	2.474	-21.	0	85			
24361	IGGTST COAL	3.	1.00-2.334	0.14	16.5	1.28	0.54	1.09	1.35	0.	0.	4.27	2.156	-12.	0	63			
24361	IGGTST COAL	3.	4.34-0.212	0.14	25.0	1.95	0.83	1.14	2.13	0.	-1.39	4.66	2.353	-18.	0	73			
24361	GTSCAR RESIDUA	3.	1.00-0.103	0.14	6.0	0.44	0.19	0.49	0.77	0.	0.	1.90	0.958	1.	999	0			
24361	GTAC08 RESIDUA	3.	1.00-0.185	0.14	5.5	0.41	0.17	0.48	0.83	0.	0.	1.89	0.956	1.	999	0			
24361	GTAC12 RESIDUA	3.	1.00-0.049	0.14	5.5	0.41	0.17	0.48	0.73	0.	0.	1.79	0.906	1.	999	0			
24361	GTAC16 RESIDUA	3.	1.00 0.009	0.14	5.6	0.42	0.18	0.48	0.69	0.	0.	1.77	0.892	1.	999	0			
24361	GTWC16 RESIDUA	3.	1.00-0.016	0.14	5.9	0.44	0.19	0.49	0.71	0.	0.	1.82	0.919	1.	999	0			
24361	CC1626 RESIDUA	3.	1.00 0.117	0.14	5.9	0.45	0.19	0.56	0.62	0.	0.	1.81	0.913	1.	999	0			
24361	CC1622 RESIDUA	3.	1.00 0.101	0.14	5.7	0.43	0.18	0.55	0.63	0.	0.	1.79	0.905	1.	999	0			
24361	CC1222 RESIDUA	3.	1.00 0.103	0.14	5.5	0.42	0.18	0.55	0.63	0.	0.	1.77	0.895	1.	999	0			
24361	CC0822 RESIDUA	3.	1.00 0.034	0.14	5.7	0.43	0.18	0.55	0.67	0.	0.	1.84	0.931	1.	999	0			
24361	STIG15 RESIDUA	3.	1.00 0.160	0.14	5.9	0.44	0.19	0.51	0.59	0.	0.	1.72	0.868	1.	999	0			
24361	STIG10 RESIDUA	3.	1.00 0.109	0.14	5.7	0.42	0.18	0.50	0.62	0.	0.	1.72	0.870	1.	999	0			
24361	STIG1S RESIDUA	3.	1.00 0.045	0.14	5.6	0.42	0.18	0.50	0.67	0.	0.	1.76	0.888	1.	999	0			
24361	DEADV3 RESIDUA	3.	1.00 0.137	0.14	7.5	0.56	0.24	0.55	0.60	0.	0.	1.95	0.986	-0.	7	10			
24361	DEHTPI1 RESIDUA	3.	1.00-0.030	0.14	7.8	0.58	0.24	0.59	0.72	0.	0.	2.13	1.075	-1.	0	70			
24361	DESOA3 DISTILL	3.	1.00 0.114	0.14	6.5	0.48	0.20	0.53	0.76	0.	0.	1.97	0.997	0.	-2	0			
24361	DESOA3 RESIDUA	3.	1.00 0.114	0.14	6.5	0.48	0.20	0.53	0.62	0.	0.	1.83	0.926	1.	999	0			
24361	GTSOAD DISTILL	3.	1.00-0.096	0.14	5.4	0.40	0.17	0.48	0.94	0.	0.	1.98	1.002	1.	-5	0			
24361	GTRA08 DISTILL	3.	1.00 0.104	0.14	6.1	0.45	0.19	0.49	0.77	0.	0.	1.91	0.963	1.	999	0			
24361	GTRA12 DISTILL	3.	1.00 0.106	0.14	6.1	0.45	0.19	0.49	0.77	0.	0.	1.89	0.957	1.	999	0			
24361	GTRA16 DISTILL	3.	1.00 0.083	0.14	6.2	0.46	0.20	0.49	0.78	0.	0.	1.94	0.977	0.	999	0			
24361	GTR208 DISTILL	3.	1.00-0.000	0.14	5.9	0.44	0.19	0.49	0.86	0.	0.	1.96	0.992	0.	-3	0			
24361	GTR212 DISTILL	3.	1.00 0.030	0.14	6.0	0.44	0.19	0.49	0.83	0.	0.	1.95	0.985	0.	-1	0			
24361	GTR216 DISTILL	3.	1.00 0.050	0.14	6.0	0.45	0.19	0.49	0.81	0.	0.	1.94	0.980	0.	999	0			
24361	GTRW08 DISTILL	3.	1.00 0.088	0.14	6.2	0.46	0.20	0.50	0.78	0.	0.	1.93	0.976	0.	999	0			
24361	GTRW12 DISTILL	3.	1.00 0.121	0.14	6.2	0.46	0.20	0.49	0.75	0.	0.	1.90	0.961	0.	999	0			
24361	GTRW16 DISTILL	3.	1.00 0.104	0.14	6.4	0.47	0.20	0.50	0.77	0.	0.	1.94	0.978	0.	999	0			
24361	GTR308 DISTILL	3.	1.00-0.032	0.14	5.9	0.44	0.19	0.49	0.88	0.	0.	2.00	1.012	0.	-7	0			
24361	GTR312 DISTILL	3.	1.00 0.064	0.14	6.0	0.45	0.19	0.49	0.80	0.	0.	1.93	0.974	0.	999	0			
24361	GTR316 DISTILL	3.	1.00 0.056	0.14	6.2	0.46	0.19	0.50	0.81	0.	0.	1.96	0.988	0.	0	0			
24361	FCPADS DISTILL	3.	1.00 0.158	0.14	5.9	0.44	0.19	0.62	0.72	0.	0.	1.97	0.994	0.	-3	0			
24361	FCMCDS DISTILL	3.	1.00 0.223	0.14	6.0	0.45	0.19	0.61	0.66	0.	0.	1.91	0.964	1.	999	0			
24921	ONOCGN COAL-AF	5.	0.	0.	4.4	0.33	0.14	0.44	0.04	1.54	0.	2.49	1.000	0.	0	0			
24921	STM141 RESIDUA	5.	0.31 0.187	0.46	3.3	0.25	0.11	0.32	0.25	1.06	0.	1.98	0.797	2.	999	0			
24921	STM141 COAL-FG	5.	0.31 0.187	0.46	6.0	0.45	0.19	0.54	0.15	1.06	0.	2.39	0.960	-0.	9	9			
24921	STM141 COAL-AF	5.	0.31 0.187	0.46	5.1	0.39	0.17	0.47	0.15	1.06	0.	2.23	0.897	0.	24	4			
24921	STM088 RESIDUA	5.	0.20 0.120	0.46	2.8	0.21	0.09	0.31	0.19	1.23	0.	2.02	0.813	2.	999	0			
24921	STM088 COAL-FG	5.	0.20 0.120	0.46	5.4	0.41	0.18	0.52	0.11	1.23	0.	2.44	0.983	-0.	8	10			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK										
24921 STM088	COAL-AF	5.	0.20 0.120	0.46	4.8	0.36 0.15	0.46 0.11	1.23	0.	2.32	0.931	0.	26	4					
24921 PFBSTM	COAL-PF	5.	0.58 0.337	0.46	7.9	0.60 0.26	0.63 0.25	0.64	0.	2.38	0.956	-1.	7	11					
24921 TISTMT	RESIDUA	5.	0.04 0.026	0.46	3.7	0.28 0.12	0.37 0.09	1.47	0.	2.34	0.939	1.	999	0					
24921 TISTMT	COAL	5.	0.81 0.474	0.46	20.3	1.54 0.65	0.92 0.32	0.29	0.	3.73	1.499	-12.	0	999					
24921 TIHRSG	RESIDUA	5.	0.03 0.010	0.46	3.6	0.26 0.11	0.32 0.09	1.50	0.	2.29	0.919	1.	999	0					
24921 TIHRSG	COAL	5.	0.48 0.192	0.46	19.1	1.45 0.62	0.79 0.29	0.80	0.	3.95	1.588	-12.	0	120					
24921 STIRL	DISTILL	5.	1.00-0.266	0.46	4.6	0.34 0.14	0.41 2.51	0.	0.	3.40	1.368	-3.	0	56					
24921 STIRL	DISTILL	5.	0.06 0.024	0.46	2.8	0.20 0.09	0.32 0.15	1.45	0.	2.20	0.886	2.	999	0					
24921 STIRL	RESIDUA	5.	1.00-0.266	0.46	4.6	0.34 0.14	0.41 2.05	0.	0.	2.94	1.182	-1.	0	56					
24921 STIRL	RESIDUA	5.	0.06 0.024	0.46	2.8	0.20 0.09	0.32 0.12	1.45	0.	2.18	0.875	2.	999	0					
24921 STIRL	COAL	5.	1.00 0.417	0.46	8.2	0.61 0.26	0.70 0.55	0.	0.	2.11	0.848	-1.	12	8					
24921 STIRL	COAL	5.	1.08 0.418	0.46	7.7	0.57 0.24	0.58 0.59	0.	-0.07	1.91	0.767	0.	16	6					
24921 HEGT60	COAL-AF	5.	1.00 0.123	0.46	18.9	1.43 0.61	0.97 0.83	0.	0.	3.84	1.544	-11.	0	213					
24921 HEGT60	COAL-AF	5.	2.25 0.126	0.46	27.6	2.10 0.89	1.09 1.80	0.	-1.15	4.73	1.900	-18.	0	142					
24921 HEGT00	COAL-AF	5.	0.80 0.158	0.46	13.8	1.04 0.44	0.62 0.61	0.31	0.	3.03	1.219	-6.	0	999					
24921 FCMCCL	COAL	5.	1.00-0.230	0.46	14.9	1.16 0.49	0.92 1.16	0.	0.	3.73	1.501	-9.	0	94					
24921 FCMCCL	COAL	5.	1.40-0.020	0.46	16.0	1.24 0.53	0.83 1.32	0.	-0.37	3.56	1.432	-9.	0	371					
24921 FCSTCL	COAL	5.	1.00-0.213	0.46	14.9	1.16 0.49	1.00 1.14	0.	0.	3.80	1.526	-9.	0	89					
24921 FCSTCL	COAL	5.	1.90 0.141	0.46	18.4	1.43 0.61	1.02 1.51	0.	-0.83	3.73	1.498	-11.	0	999					
24921 IGGTST	COAL	5.	1.00-0.334	0.46	15.2	1.18 0.50	0.94 1.25	0.	0.	3.89	1.562	-10.	0	83					
24921 IGGTST	COAL	5.	1.28-0.171	0.46	15.7	1.22 0.52	0.81 1.40	0.	-0.26	3.69	1.483	-9.	0	114					
24921 GTSOAR	RESIDUA	5.	1.00-0.057	0.46	5.4	0.40 0.17	0.43 1.71	0.	0.	2.70	1.087	-1.	0	60					
24921 GTSOAR	RESIDUA	5.	0.08 0.034	0.46	3.0	0.22 0.09	0.31 0.14	1.41	0.	2.18	0.876	2.	999	0					
24921 GTAC08	RESIDUA	5.	1.00-0.135	0.46	4.5	0.33 0.14	0.37 1.84	0.	0.	2.69	1.080	-1.	0	55					
24921 GTAC08	RESIDUA	5.	0.06 0.031	0.46	2.7	0.20 0.09	0.30 0.11	1.45	0.	2.15	0.863	2.	999	0					
24921 GTAC12	RESIDUA	5.	1.00-0.005	0.46	4.7	0.35 0.15	0.40 1.63	0.	0.	2.53	1.016	-0.	0	59					
24921 GTAC12	RESIDUA	5.	0.08 0.039	0.46	2.8	0.20 0.09	0.31 0.13	1.42	0.	2.14	0.861	2.	999	0					
24921 GTAC16	RESIDUA	5.	1.00 0.051	0.46	5.0	0.37 0.16	0.41 1.54	0.	0.	2.48	0.995	-0.	7	11					
24921 GTAC16	RESIDUA	5.	0.09 0.043	0.46	2.8	0.21 0.09	0.31 0.14	1.40	0.	2.15	0.862	2.	999	0					
24921 GTWC16	RESIDUA	5.	1.00 0.027	0.46	5.3	0.39 0.17	0.43 1.58	0.	0.	2.56	1.028	-1.	0	125					
24921 GTWC16	RESIDUA	5.	0.09 0.041	0.46	2.9	0.22 0.09	0.31 0.14	1.40	0.	2.17	0.871	2.	999	0					
24921 CC1626	RESIDUA	5.	1.00 0.154	0.46	5.4	0.41 0.18	0.52 1.37	0.	0.	2.48	0.995	-0.	6	12					
24921 CC1626	RESIDUA	5.	0.13 0.057	0.46	3.1	0.23 0.10	0.37 0.18	1.34	0.	2.22	0.893	1.	999	0					
24921 CC1622	RESIDUA	5.	1.00 0.139	0.46	5.2	0.39 0.17	0.51 1.39	0.	0.	2.46	0.989	-0.	7	11					
24921 CC1622	RESIDUA	5.	0.12 0.054	0.46	2.9	0.22 0.09	0.37 0.16	1.36	0.	2.21	0.886	2.	999	0					
24921 CC1222	RESIDUA	5.	1.00 0.141	0.46	5.0	0.38 0.16	0.50 1.39	0.	0.	2.43	0.978	-0.	11	8					
24921 CC1222	RESIDUA	5.	0.12 0.054	0.46	2.9	0.22 0.09	0.37 0.16	1.36	0.	2.20	0.883	2.	999	0					
24921 CC0822	RESIDUA	5.	1.00 0.075	0.46	5.1	0.38 0.16	0.50 1.50	0.	0.	2.54	1.023	-1.	0	999					
24921 CC0822	RESIDUA	5.	0.09 0.045	0.46	2.9	0.22 0.09	0.36 0.14	1.40	0.	2.20	0.886	2.	999	0					
24921 STIG15	RESIDUA	5.	1.00 0.166	0.46	5.6	0.42 0.18	0.51 1.35	0.	0.	2.45	0.986	-0.	7	11					
24921 STIG15	RESIDUA	5.	3.44 0.171	0.46	10.4	0.77 0.33	0.81 4.48	0.	-2.25	4.13	1.661	-8.	0	61					
24921 STIG10	RESIDUA	5.	1.00 0.147	0.46	5.3	0.39 0.17	0.48 1.38	0.	0.	2.42	0.973	-0.	10	8					
24921 STIG10	RESIDUA	5.	0.32 0.075	0.46	3.7	0.27 0.12	0.37 0.44	1.05	0.	2.25	0.904	1.	999	0					
24921 STIG1S	RESIDUA	5.	1.00 0.086	0.46	5.1	0.38 0.16	0.47 1.48	0.	0.	2.50	1.004	-0.	4	16					

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC		ELEC				WORTH 15%	%	PAY BACK						
24921 STIG1S	RESIDUA	5.	0.19	0.050	0.46	3.2	0.24	0.10	0.34	0.28	1.25	0.	2.21	0.889	1.	999	0		
24921 DEADV3	RESIDUA	5.	1.00	0.174	0.46	7.2	0.54	0.23	0.53	1.34	0.	0.	2.63	1.057	-2.	0	999		
24921 DEADV3	RESIDUA	5.	0.23	0.073	0.46	4.5	0.33	0.14	0.39	0.31	1.18	0.	2.36	0.948	0.	999	1		
24921 DEHTPM	RESIDUA	5.	1.00	0.014	0.46	7.3	0.54	0.23	0.54	1.60	0.	0.	2.90	1.167	-3.	0	70		
24921 DEHTPM	RESIDUA	5.	0.09	0.040	0.46	2.9	0.22	0.09	0.34	0.14	1.41	0.	2.19	0.881	2.	999	0		
24921 DESOA3	DISTILL	5.	1.00	0.151	0.46	6.5	0.48	0.21	0.51	1.69	0.	0.	2.89	1.160	-2.	0	64		
24921 DESOA3	DISTILL	5.	0.27	0.072	0.46	3.6	0.27	0.11	0.38	0.46	1.12	0.	2.34	0.942	1.	999	0		
24921 DESOA3	RESIDUA	5.	1.00	0.151	0.46	6.5	0.48	0.21	0.51	1.38	0.	0.	2.58	1.035	-1.	0	26		
24921 DESOA3	RESIDUA	5.	0.27	0.072	0.46	3.6	0.27	0.11	0.38	0.38	1.12	0.	2.26	0.908	1.	999	0		
24921 GTSOAD	DISTILL	5.	1.00	-0.050	0.46	4.5	0.33	0.14	0.40	2.08	0.	0.	2.95	1.187	-1.	0	55		
24921 GTSOAD	DISTILL	5.	0.07	0.035	0.46	2.7	0.20	0.09	0.30	0.16	1.42	0.	2.17	0.874	2.	999	0		
24921 GTRA08	DISTILL	5.	1.00	0.142	0.46	5.7	0.42	0.18	0.45	1.70	0.	0.	2.75	1.107	-1.	0	62		
24921 GTRA08	DISTILL	5.	0.13	0.055	0.46	3.2	0.24	0.10	0.33	0.22	1.34	0.	2.23	0.896	1.	999	0		
24921 GTRA12	DISTILL	5.	1.00	0.144	0.46	5.6	0.42	0.18	0.44	1.70	0.	0.	2.74	1.101	-1.	0	62		
24921 GTRA12	DISTILL	5.	0.13	0.055	0.46	3.1	0.23	0.10	0.32	0.22	1.34	0.	2.21	0.890	1.	999	0		
24921 GTRA16	DISTILL	5.	1.00	0.122	0.46	5.9	0.43	0.18	0.45	1.74	0.	0.	2.81	1.129	-2.	0	61		
24921 GTRA16	DISTILL	5.	0.12	0.052	0.46	3.1	0.23	0.10	0.32	0.20	1.36	0.	2.22	0.891	1.	999	0		
24921 GTR208	DISTILL	5.	1.00	0.042	0.46	5.3	0.39	0.17	0.43	1.90	0.	0.	2.89	1.161	-2.	0	57		
24921 GTR208	DISTILL	5.	0.10	0.042	0.46	3.0	0.22	0.09	0.31	0.18	1.39	0.	2.20	0.885	2.	999	0		
24921 GTR212	DISTILL	5.	1.00	0.071	0.46	5.5	0.40	0.17	0.43	1.84	0.	0.	2.85	1.147	-2.	0	58		
24921 GTR212	DISTILL	5.	0.10	0.045	0.46	3.0	0.22	0.10	0.32	0.19	1.38	0.	2.21	0.887	2.	999	0		
24921 GTR216	DISTILL	5.	1.00	0.091	0.46	5.6	0.41	0.18	0.44	1.81	0.	0.	2.83	1.138	-2.	0	59		
24921 GTR216	DISTILL	5.	0.11	0.047	0.46	3.0	0.23	0.10	0.32	0.19	1.38	0.	2.21	0.887	2.	999	0		
24921 GTRW08	DISTILL	5.	1.00	0.127	0.46	5.9	0.43	0.18	0.46	1.73	0.	0.	2.81	1.128	-2.	0	61		
24921 GTRW08	DISTILL	5.	0.16	0.055	0.46	3.4	0.25	0.11	0.34	0.27	1.30	0.	2.26	0.908	1.	999	0		
24921 GTRW12	DISTILL	5.	1.00	0.158	0.46	5.9	0.43	0.18	0.45	1.67	0.	0.	2.74	1.103	-1.	0	64		
24921 GTRW12	DISTILL	5.	0.16	0.060	0.46	3.4	0.25	0.11	0.33	0.26	1.30	0.	2.25	0.904	1.	999	0		
24921 GTRW16	DISTILL	5.	1.00	0.142	0.46	6.0	0.45	0.19	0.46	1.70	0.	0.	2.80	1.124	-2.	0	63		
24921 GTRW16	DISTILL	5.	0.14	0.057	0.46	3.4	0.25	0.11	0.33	0.24	1.32	0.	2.25	0.905	1.	999	0		
24921 GTR308	DISTILL	5.	1.00	0.011	0.46	5.4	0.40	0.17	0.44	1.96	0.	0.	2.98	1.198	-2.	0	58		
24921 GTR308	DISTILL	5.	0.12	0.039	0.46	3.1	0.23	0.10	0.32	0.23	1.36	0.	2.24	0.899	1.	999	0		
24921 GTR312	DISTILL	5.	1.00	0.104	0.46	5.5	0.41	0.17	0.44	1.78	0.	0.	2.81	1.128	-1.	0	59		
24921 GTR312	DISTILL	5.	0.12	0.050	0.46	3.2	0.23	0.10	0.32	0.22	1.35	0.	2.23	0.895	1.	999	0		
24921 GTR316	DISTILL	5.	1.00	0.096	0.46	5.7	0.43	0.18	0.45	1.80	0.	0.	2.85	1.145	-2.	0	60		
24921 GTR316	DISTILL	5.	0.12	0.049	0.46	3.2	0.24	0.10	0.32	0.22	1.35	0.	2.23	0.898	1.	999	0		
24921 FCPADS	DISTILL	5.	1.00	0.193	0.46	5.5	0.40	0.17	0.82	1.60	0.	0.	3.00	1.204	-2.	0	61		
24921 FCPADS	DISTILL	5.	0.26	0.082	0.46	3.4	0.25	0.11	0.42	0.42	1.14	0.	2.33	0.937	1.	999	0		
24921 FCMCDS	DISTILL	5.	1.00	0.256	0.46	5.6	0.42	0.18	0.78	1.48	0.	0.	2.85	1.147	-2.	0	65		
24921 FCMCDS	DISTILL	5.	0.21	0.087	0.46	3.3	0.24	0.10	0.38	0.31	1.22	0.	2.25	0.904	1.	999	0		
26212 ONOCGN	COAL-FG	50.	0.	0.	0.22	47.9	3.63	1.54	2.51	10.02	16.17	0.	33.88	1.000	0.	0	0		
26212 STM141	RESIDUA	50.	0.94	0.286	0.22	32.3	2.45	1.64	1.41	23.04	0.91	0.	28.86	0.832	23.	999	0		
26212 STM141	COAL-FG	50.	0.94	0.286	0.22	61.3	4.65	1.98	3.20	13.38	0.91	0.	24.12	0.712	24.	42	3		
26212 STM141	COAL-AF	50.	0.94	0.286	0.22	42.6	3.23	1.38	2.93	13.38	0.91	0.	21.83	0.644	40.	999	0		
26212 STM088	RESIDUA	50.	0.69	0.208	0.22	25.6	1.95	0.83	1.24	21.46	5.09	0.	30.56	0.902	21.	999	0		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS							
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	+ INSNC	ELEC							WORTH	%	PAY				
		MW	REQD	RATIO *10**6									15%		BACK				
26212 STM088	COAL-FG	50.	0.69	0.208	0.22	57.3	4.35	1.85	2.99	12.46	5.09	0.	26.74	0.789	18.	43	3		
26212 STM088	COAL-AF	50.	0.69	0.208	0.22	41.0	3.11	1.32	2.83	12.46	5.09	0.	24.81	0.732	32.	999	0		
26212 PFBSTM	COAL-PF	50.	1.00	0.297	0.22	63.2	4.79	2.04	4.84	13.70	0.	0.	25.37	0.749	19.	34	3		
26212 PFBSTM	COAL-PF	50.	1.53	0.361	0.22	60.9	4.62	1.97	5.13	15.66	0.	-5.16	22.22	0.656	30.	49	2		
26212 TISTMT	RESIDUA	50.	1.00	0.298	0.22	105.8	8.03	3.41	3.57	23.55	0.	0.	38.56	1.138	-42.	0	999		
26212 TISTMT	RESIDUA	50.	1.26	0.333	0.22	118.8	9.01	3.83	3.90	25.19	0.	-2.52	39.42	1.164	-51.	0	999		
26212 TISTMT	COAL	50.	1.00	0.298	0.22	140.2	10.64	4.52	5.58	13.68	0.	0.	34.43	1.016	-46.	4	14		
26212 TISTMT	COAL	50.	2.05	0.404	0.22	202.1	15.34	6.52	6.85	17.50	0.	-10.15	36.07	1.065	-81.	4	16		
26212 TIHRSG	RESIDUA	50.	0.61	0.135	0.22	105.5	7.81	3.32	3.40	22.71	6.26	0.	43.50	1.284	-56.	0	65		
26212 TIHRSG	COAL	50.	1.00	0.219	0.22	179.8	13.64	5.80	6.06	15.17	0.06	0.	40.74	1.202	-85.	0	999		
26212 STIRL	DISTILL	50.	1.00	0.215	0.22	53.6	3.97	1.69	2.22	32.28	0.	0.	40.16	1.185	-22.	0	56		
26212 STIRL	DISTILL	50.	1.49	0.259	0.22	63.2	1.68	1.99	2.48	37.69	0.	-4.71	42.13	1.243	-32.	0	57		
26212 STIRL	RESIDUA	50.	1.00	0.215	0.22	53.7	3.98	1.69	2.22	26.33	0.	0.	34.22	1.010	-3.	0	180		
26212 STIRL	RESIDUA	50.	1.49	0.259	0.22	63.3	4.69	1.99	2.48	30.74	0.	-4.71	35.20	1.039	-11.	0	114		
26212 STIRL	COAL	50.	1.00	0.215	0.22	91.5	6.77	2.88	4.41	15.29	0.	0.	29.36	0.867	-6.	12	8		
26212 STIRL	COAL	50.	2.41	0.308	0.22	150.0	11.11	4.72	5.79	22.75	0.	-13.72	30.66	0.905	-37.	7	11		
26212 HEGT85	COAL-AF	50.	1.00	0.069	0.22	120.7	9.16	3.89	5.20	18.14	0.	0.	36.39	1.074	-43.	2	22		
26212 HEGT85	COAL-AF	50.	12.41	0.131	0.22	652.2	49.49	21.04	23.87	110.80	0.	-110.71	94.49	2.789	-480.	0	126		
26212 HEGT60	COAL-AF	50.	1.00	0.091	0.22	115.1	8.74	3.71	5.08	17.71	0.	0.	35.25	1.040	-37.	3	17		
26212 HEGT60	COAL-AF	50.	4.07	0.140	0.22	213.3	16.19	6.88	8.72	41.36	0.	-29.82	43.33	1.279	-109.	0	999		
26212 HEGT00	COAL-AF	50.	1.00	0.110	0.22	100.7	7.64	3.25	4.76	17.34	0.	0.	32.98	0.974	-23.	6	12		
26212 HEGT00	COAL-AF	50.	1.65	0.138	0.22	117.0	8.88	3.78	5.11	22.07	0.	-6.28	33.56	0.991	-32.	5	13		
26212 FCMCCL	COAL	50.	1.00	0.062	0.22	96.8	7.52	3.20	5.36	20.69	0.	0.	36.77	1.085	-34.	0	999		
26212 FCMCCL	COAL	50.	2.94	0.226	0.22	142.4	11.07	4.71	8.45	29.24	0.	-18.78	34.69	1.024	-50.	4	15		
26212 FCSTCL	COAL	50.	1.00	0.052	0.22	101.8	7.91	3.37	5.37	20.50	0.	0.	37.15	1.096	-37.	0	999		
26212 FCSTCL	COAL	50.	4.46	0.328	0.22	172.5	13.41	5.70	10.26	35.09	0.	-33.56	30.90	0.912	-53.	7	11		
26212 IGGTST	COAL	50.	1.00	0.108	0.22	89.1	6.92	2.94	4.02	21.58	0.	0.	35.47	1.047	-26.	1	23		
26212 IGGTST	COAL	50.	3.10	0.169	0.22	137.8	10.71	4.56	4.50	32.71	0.	-20.37	32.11	0.948	-39.	6	12		
26212 GTSCAR	RESIDUA	50.	1.00	0.217	0.22	39.9	2.96	1.26	1.79	26.27	0.	0.	32.27	0.952	9.	999	0		
26212 GTSCAR	RESIDUA	50.	1.92	0.288	0.22	48.3	3.57	1.52	2.04	34.59	0.	-8.96	32.76	0.967	4.	999	0		
26212 GTAC08	RESIDUA	50.	1.00	0.258	0.22	37.1	2.75	1.17	1.71	24.88	0.	0.	30.50	0.900	16.	999	0		
26212 GTAC08	RESIDUA	50.	1.48	0.310	0.22	40.1	2.97	1.26	1.80	28.51	0.	-4.62	29.92	0.883	17.	999	0		
26212 GTAC12	RESIDUA	50.	1.00	0.254	0.22	38.5	2.85	1.21	1.75	25.02	0.	0.	30.83	0.910	15.	999	0		
26212 GTAC12	RESIDUA	50.	1.85	0.333	0.22	45.9	3.40	1.45	1.96	31.60	0.	-8.23	30.17	0.891	13.	999	0		
26212 GTAC16	RESIDUA	50.	1.00	0.249	0.22	39.9	2.96	1.26	1.78	25.19	0.	0.	31.18	0.920	13.	999	0		
26212 GTAC16	RESIDUA	50.	2.10	0.341	0.22	50.9	3.77	1.60	2.10	33.92	0.	-10.68	30.71	0.906	9.	87	2		
26212 GTWC16	RESIDUA	50.	1.00	0.227	0.22	39.1	2.89	1.23	1.77	25.93	0.	0.	31.82	0.939	11.	999	0		
26212 GTWC16	RESIDUA	50.	2.19	0.315	0.22	48.6	3.60	1.53	2.05	36.25	0.	-11.55	31.89	0.941	6.	999	0		
26212 CC1626	RESIDUA	50.	1.00	0.224	0.22	42.9	3.26	1.38	1.98	26.02	0.	0.	32.64	0.963	6.	999	0		
26212 CC1626	RESIDUA	50.	3.46	0.354	0.22	61.3	4.65	1.98	2.58	47.53	0.	-23.81	32.92	0.972	-3.	10	9		
26212 CC1622	RESIDUA	50.	1.00	0.235	0.22	43.4	3.29	1.40	1.98	25.65	0.	0.	32.31	0.954	7.	999	0		
26212 CC1622	RESIDUA	50.	3.11	0.362	0.22	62.5	4.74	2.02	2.55	43.34	0.	-20.45	32.21	0.951	-2.	12	7		
26212 CC1222	RESIDUA	50.	1.00	0.238	0.22	42.3	3.21	1.37	1.96	25.57	0.	0.	32.12	0.948	8.	999	0		
26212 CC1222	RESIDUA	50.	3.09	0.365	0.22	59.5	4.51	1.92	2.51	42.91	0.	-20.30	31.63	0.933	2.	17	6		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST														
		MW	REQD	RATIO	*10**6	INSNC		ELEC				WORTH	%	PAY					
												15%		BACK					
26212 CC0822	RESIDUA	50.	1.00	0.255	0.22	38.4	2.91	1.24	1.56	25.01	0.	0.	31.02	0.916	14.	999	0		
26212 CC0822	RESIDUA	50.	2.46	0.367	0.22	51.0	3.87	1.65	2.26	36.32	0.	-14.17	29.93	0.884	11.	66	2		
26212 ST1015	RESIDUA	50.	1.00	0.084	0.22	43.7	3.24	1.38	2.32	30.73	0.	0.	37.67	1.112	-9.	-42	0		
26212 ST1015	RESIDUA	50.	82.46	0.171	0.22	1012.1	74.97	31.87	62.10	128.33	0.	-790.16	507.10	14.968	-1939.	0	58		
26212 ST1010	RESIDUA	50.	1.00	0.120	0.22	42.2	3.13	1.33	2.14	29.51	0.	0.	36.11	1.066	-4.	-24	0		
26212 ST1010	RESIDUA	50.	7.63	0.218	0.22	115.5	8.56	3.64	6.13	110.70	0.	-64.27	64.76	1.912	-128.	0	58		
26212 ST1015	RESIDUA	50.	1.00	0.137	0.22	41.5	3.07	1.31	2.15	28.95	0.	0.	35.47	1.047	-1.	-18	0		
26212 ST1015	RESIDUA	50.	4.47	0.228	0.22	75.4	5.58	2.37	4.21	69.58	0.	-33.70	48.05	1.418	-57.	0	58		
26212 DEADV3	RESIDUA	50.	1.00	0.168	0.22	60.4	4.47	1.90	2.38	27.92	0.	0.	36.67	1.082	-14.	0	60		
26212 DEADV3	RESIDUA	50.	5.09	0.286	0.22	175.2	12.98	5.52	5.48	71.56	0.	-39.70	55.84	1.648	-128.	0	65		
26212 DEHTPM	RESIDUA	50.	1.00	0.250	0.22	59.3	4.39	1.87	2.41	25.16	0.	0.	33.83	0.999	-5.	5	13		
26212 DEHTPM	RESIDUA	50.	2.15	0.345	0.22	92.8	6.88	2.92	3.34	34.23	0.	-11.13	36.25	1.070	-28.	0	999		
26212 DESQA3	DISTILL	50.	1.00	0.142	0.22	68.6	5.08	2.16	2.59	35.29	0.	0.	45.12	1.332	-44.	0	57		
26212 DESQA3	DISTILL	50.	5.94	0.248	0.22	248.5	18.41	7.83	7.37	105.16	0.	-47.92	90.84	2.681	-272.	0	60		
26212 DESQA3	RESIDUA	50.	1.00	0.142	0.22	68.6	5.08	2.16	2.59	28.79	0.	0.	38.62	1.140	-24.	0	61		
26212 DESQA3	RESIDUA	50.	5.94	0.248	0.22	248.5	18.41	7.83	7.37	85.79	0.	-47.92	71.46	2.109	-211.	0	64		
26212 GTSQAD	DISTILL	50.	1.00	0.242	0.22	36.4	2.70	1.15	1.70	31.18	0.	0.	36.72	1.084	-3.	-19	0		
26212 GTSQAD	DISTILL	50.	1.78	0.312	0.22	41.6	3.08	1.31	1.85	39.04	0.	-7.60	37.68	1.112	-8.	-32	0		
26212 GTRA08	DISTILL	50.	1.00	0.223	0.22	44.7	3.31	1.41	1.90	31.97	0.	0.	38.59	1.139	-13.	-58	0		
26212 GTRA08	DISTILL	50.	2.99	0.338	0.22	69.7	5.16	2.20	2.61	53.47	0.	-19.28	44.17	1.304	-42.	0	58		
26212 GTRA12	DISTILL	50.	1.00	0.228	0.22	45.2	3.34	1.42	1.91	31.73	0.	0.	38.41	1.134	-12.	-62	0		
26212 GTRA12	DISTILL	50.	2.91	0.345	0.22	68.2	5.05	2.15	2.57	51.94	0.	-18.52	43.18	1.275	-38.	0	58		
26212 GTRA16	DISTILL	50.	1.00	0.230	0.22	46.2	3.43	1.46	1.94	31.66	0.	0.	38.48	1.136	-13.	-83	0		
26212 GTRA16	DISTILL	50.	2.71	0.341	0.22	68.5	5.07	2.16	2.57	49.62	0.	-16.59	42.83	1.264	-37.	0	58		
26212 GTR208	DISTILL	50.	1.00	0.230	0.22	39.9	2.95	1.26	1.79	31.68	0.	0.	37.67	1.112	-8.	-28	0		
26212 GTR208	DISTILL	50.	2.24	0.321	0.22	51.6	3.82	1.63	2.13	44.72	0.	-12.02	40.27	1.189	-21.	0	56		
26212 GTR212	DISTILL	50.	1.00	0.229	0.22	40.7	3.01	1.28	1.81	31.71	0.	0.	37.81	1.116	-8.	-30	0		
26212 GTR212	DISTILL	50.	2.40	0.327	0.22	54.8	4.06	1.72	2.21	46.51	0.	-13.59	40.91	1.207	-25.	0	56		
26212 GTR216	DISTILL	50.	1.00	0.233	0.22	41.8	3.10	1.32	1.83	31.53	0.	0.	37.77	1.115	-9.	-34	0		
26212 GTR216	DISTILL	50.	2.46	0.336	0.22	58.1	4.30	1.83	2.30	46.70	0.	-14.19	40.94	1.208	-26.	0	57		
26212 GTRW08	DISTILL	50.	1.00	0.187	0.22	44.2	3.27	1.39	1.90	33.42	0.	0.	39.98	1.180	-17.	-66	0		
26212 GTRW08	DISTILL	50.	3.56	0.297	0.22	71.3	5.28	2.24	2.69	64.83	0.	-24.84	50.21	1.482	-62.	0	57		
26212 GTRW12	DISTILL	50.	1.00	0.201	0.22	44.2	3.27	1.39	1.89	32.85	0.	0.	39.41	1.163	-15.	-61	0		
26212 GTRW12	DISTILL	50.	3.61	0.320	0.22	71.7	5.31	2.26	2.70	63.42	0.	-25.34	48.35	1.427	-56.	0	57		
26212 GTRW16	DISTILL	50.	1.00	0.204	0.22	44.9	3.33	1.41	1.91	32.72	0.	0.	39.38	1.162	-15.	-69	0		
26212 GTRW16	DISTILL	50.	3.34	0.319	0.22	63.7	4.72	2.01	2.49	59.82	0.	-22.71	46.32	1.367	-46.	0	57		
26212 GTR308	DISTILL	50.	1.00	0.174	0.22	43.0	3.19	1.36	1.88	33.99	0.	0.	40.41	1.193	-18.	-58	0		
26212 GTR308	DISTILL	50.	2.72	0.257	0.22	54.9	4.07	1.73	2.25	56.05	0.	-16.67	47.42	1.400	-45.	0	56		
26212 GTR312	DISTILL	50.	1.00	0.208	0.22	42.9	3.18	1.35	1.86	32.55	0.	0.	38.95	1.150	-13.	-47	0		
26212 GTR312	DISTILL	50.	2.90	0.314	0.22	56.0	4.15	1.76	2.27	54.25	0.	-18.46	43.97	1.298	-35.	0	56		
26212 GTR316	DISTILL	50.	1.00	0.207	0.22	43.8	3.24	1.38	1.89	32.60	0.	0.	39.11	1.154	-14.	-54	0		
26212 GTR316	DISTILL	50.	2.86	0.311	0.22	57.3	4.24	1.80	2.31	53.88	0.	-18.02	44.21	1.305	-36.	0	56		
26212 FCPADS	DISTILL	50.	1.00	0.158	0.22	57.1	4.23	1.80	6.71	34.61	0.	0.	47.34	1.397	-47.	0	57		
26212 FCPADS	DISTILL	50.	6.29	0.279	0.22	189.6	14.04	5.97	34.74	105.77	0.	-51.31	109.21	3.224	-306.	0	59		

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML PRESENT ROI GROSS														
SYSTEM	FUEL	REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC											
26212 FCMCDS DISTILL	50.	1.00	0.212	0.22	59.1	4.38	1.86	6.39	32.41	0.	0.	45.05	1.330	-40.	0	58
26212 FCMCDS DISTILL	50.	4.98	0.360	0.22	164.2	12.16	5.17	26.14	77.17	0.	-38.56	82.08	2.423	-208.	0	60
26214 ONOCGN COAL-FG	29.	0.	0.	0.16	40.7	3.09	1.31	2.15	8.14	9.38	0.	24.08	1.000	0.	0	0
26214 STM141 RESIDUA	29.	1.00	0.251	0.16	24.4	1.85	0.79	1.40	17.58	0.	0.	21.62	0.898	16.	999	0
26214 STM141 RESIDUA	29.	1.35	0.296	0.16	24.2	1.84	0.78	1.17	18.81	0.	-1.94	20.65	0.858	19.	999	0
26214 STM141 COAL-FG	29.	1.00	0.251	0.16	48.8	3.70	1.57	3.00	10.21	0.	0.	18.48	0.767	14.	40	3
26214 STM141 COAL-FG	29.	1.35	0.296	0.16	52.2	3.96	1.69	2.75	10.92	0.	-1.94	17.38	0.722	15.	35	3
26214 STM141 COAL-AF	29.	1.00	0.251	0.16	43.6	3.31	1.41	2.94	10.21	0.	0.	17.86	0.742	18.	104	1
26214 STM141 COAL-AF	29.	1.35	0.296	0.16	37.0	2.81	1.20	2.50	10.92	0.	-1.94	15.49	0.643	29.	999	0
26214 STM088 RESIDUA	29.	0.99	0.249	0.16	21.9	1.66	0.71	1.10	17.55	0.07	0.	21.10	0.876	18.	999	0
26214 STM088 COAL-FG	29.	0.99	0.249	0.16	48.8	3.71	1.58	2.58	10.19	0.07	0.	18.13	0.753	15.	42	3
26214 STM088 COAL-AF	29.	0.99	0.249	0.16	35.6	2.70	1.15	2.42	10.19	0.07	0.	16.54	0.687	26.	999	0
26214 PFBSTM COAL-PF	29.	1.00	0.246	0.16	51.1	3.88	1.65	3.70	10.27	0.	0.	19.49	0.810	9.	28	4
26214 PFBSTM COAL-PF	29.	2.14	0.362	0.16	52.2	3.96	1.68	4.26	12.71	0.	-6.44	16.18	0.672	19.	39	3
26214 TISTMT RESIDUA	29.	1.00	0.247	0.16	73.7	5.59	2.38	2.67	17.67	0.	0.	28.31	1.176	-29.	0	75
26214 TISTMT RESIDUA	29.	1.82	0.338	0.16	101.2	7.68	3.26	3.39	20.67	0.	-4.62	30.39	1.262	-49.	0	101
26214 TISTMT COAL	29.	1.00	0.247	0.16	99.7	7.57	3.22	4.27	10.26	0.	0.	25.32	1.052	-32.	3	17
26214 TISTMT COAL	29.	2.85	0.403	0.16	169.3	12.85	5.46	5.79	14.18	0.	-10.40	27.88	1.158	-74.	2	20
26214 TIHRSG RESIDUA	29.	1.00	0.084	0.16	98.0	7.26	3.09	3.14	21.49	0.	0.	34.98	1.453	-60.	0	63
26214 TIHRSG RESIDUA	29.	0.86	0.157	0.16	88.9	6.58	2.80	2.92	18.46	1.32	0.	32.08	1.333	-47.	0	65
26214 TIHRSG COAL	29.	1.00	0.183	0.16	131.9	10.01	4.25	4.97	11.14	0.	0.	30.37	1.261	-63.	0	999
26214 TIHRSG COAL	29.	1.34	0.215	0.16	149.5	11.35	4.82	5.07	12.17	0.	-1.93	31.48	1.308	-75.	0	999
26214 STIRL DISTILL	29.	1.00	0.178	0.16	38.4	2.84	1.21	1.74	23.64	0.	0.	29.43	1.223	-15.	-82	0
26214 STIRL DISTILL	29.	2.08	0.259	0.16	50.5	3.74	1.59	2.09	30.62	0.	-6.08	31.97	1.328	-29.	0	57
26214 STIRL RESIDUA	29.	1.00	0.178	0.16	38.4	2.85	1.21	1.74	19.29	0.	0.	25.08	1.042	-2.	-22	0
26214 STIRL RESIDUA	29.	2.08	0.259	0.16	50.6	3.75	1.59	2.09	24.98	0.	-6.08	26.33	1.094	-11.	0	60
26214 STIRL COAL	29.	1.00	0.178	0.16	64.1	4.74	2.02	3.38	11.20	0.	0.	21.34	0.886	-2.	13	7
26214 STIRL COAL	29.	3.26	0.304	0.16	117.4	8.70	3.70	4.67	18.09	0.	-12.69	22.46	0.933	-30.	6	11
26214 HEGT85 COAL-AF	29.	1.00	0.057	0.16	82.1	6.23	2.65	3.79	12.85	0.	0.	25.52	1.060	-24.	2	22
26214 HEGT85 COAL-AF	29.	16.74	0.130	0.16	487.4	36.98	15.72	18.23	86.96	0.	-88.54	69.35	2.881	-357.	0	121
26214 HEGT60 COAL-AF	29.	1.00	0.075	0.16	79.3	6.02	2.56	3.73	12.60	0.	0.	24.92	1.035	-21.	3	18
26214 HEGT60 COAL-AF	29.	5.49	0.147	0.16	179.2	13.60	5.78	7.23	32.65	0.	-25.28	33.98	1.411	-98.	0	999
26214 HEGT00 COAL-AF	29.	1.00	0.091	0.16	75.6	5.73	2.44	3.67	12.38	0.	0.	24.23	1.006	-17.	4	14
26214 HEGT00 COAL-AF	29.	2.22	0.136	0.16	98.3	7.46	3.17	4.25	17.57	0.	-6.87	25.56	1.062	-32.	2	19
26214 FCMCCL COAL	29.	1.00	0.122	0.16	73.4	5.71	2.43	4.02	15.29	0.	0.	27.45	1.140	-27.	0	184
26214 FCMCCL COAL	29.	3.96	0.234	0.16	119.0	9.25	3.93	6.89	22.87	0.	-16.65	26.29	1.092	-46.	2	19
26214 FCSTCL COAL	29.	1.00	0.114	0.16	71.2	5.54	2.35	3.92	15.18	0.	0.	26.99	1.121	-25.	0	***
26214 FCSTCL COAL	29.	6.13	0.337	0.16	145.3	11.30	4.80	8.45	27.71	0.	-28.87	23.39	0.972	-50.	5	13
26214 IGGTST COAL	29.	1.00	0.159	0.16	68.4	5.31	2.26	3.32	15.79	0.	0.	26.69	1.108	-22.	0	743
26214 IGGTST COAL	29.	4.28	0.183	0.16	115.4	8.97	3.81	3.87	25.83	0.	-18.46	24.02	0.998	-37.	5	13
26214 GTSOAR RESIDUA	29.	1.00	0.180	0.16	31.4	2.33	0.99	1.49	19.25	0.	0.	24.06	0.999	5.	-5	0
26214 GTSOAR RESIDUA	29.	2.70	0.288	0.16	40.0	2.96	1.26	1.76	28.11	0.	-9.54	24.55	1.020	-1.	-20	0
26214 GTAC08 RESIDUA	29.	1.00	0.214	0.16	29.5	2.19	0.93	1.44	18.44	0.	0.	23.00	0.955	9.	999	0
26214 GTAC08 RESIDUA	29.	2.07	0.310	0.16	30.8	2.28	0.97	1.50	23.16	0.	-6.01	21.90	0.910	12.	999	0

HONEYWELL PAGE PRINTING SYSTEM- P1185-02

ORIGINAL PAGE IS
OF POOR QUALITY

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****[LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)]*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	/HEAT COST															
		MW	REQD	RATIO *10**6										WORTH	%	PAY	BACK		
														15%					
26214 GTAC12 RESIDUA	29.	1.00	0.211	0.16	30.2	2.24	0.95	1.46	18.52	0.	0.	23.17	0.962	8.	999	0			
26214 GTAC12 RESIDUA	29.	2.59	0.333	0.16	35.6	2.64	1.12	1.64	25.67	0.	-8.94	22.12	0.919	9.	999	0			
26214 GTAC16 RESIDUA	29.	1.00	0.207	0.16	31.1	2.30	0.98	1.48	18.62	0.	0.	23.37	0.971	7.	999	0			
26214 GTAC16 RESIDUA	29.	2.94	0.341	0.16	39.8	2.95	1.25	1.75	27.56	0.	-10.94	22.58	0.938	6.	999	0			
26214 GTAC16 RESIDUA	29.	1.00	0.188	0.16	30.9	2.29	0.97	1.48	19.05	0.	0.	23.79	0.988	5.	-2	0			
26214 GTAC16 RESIDUA	29.	3.07	0.315	0.16	38.2	2.83	1.20	1.73	29.45	0.	-11.64	23.58	0.979	3.	999	0			
26214 CC1626 RESIDUA	29.	1.00	0.187	0.16	31.1	2.36	1.00	1.58	19.09	0.	0.	24.04	0.999	5.	-5	0			
26214 CC1626 RESIDUA	29.	4.93	0.356	0.16	51.7	3.92	1.67	2.26	39.00	0.	-22.09	24.76	1.029	-7.	0	999			
26214 CC1622 RESIDUA	29.	1.00	0.196	0.16	31.1	2.36	1.00	1.58	18.88	0.	0.	23.82	0.989	5.	-2	0			
26214 CC1622 RESIDUA	29.	4.43	0.364	0.16	52.3	3.97	1.69	2.23	35.55	0.	-19.32	24.13	1.002	-6.	4	14			
26214 CC1222 RESIDUA	29.	1.00	0.198	0.16	30.5	2.31	0.98	1.57	18.83	0.	0.	23.70	0.984	6.	-1	0			
26214 CC1222 RESIDUA	29.	4.41	0.367	0.16	49.7	3.77	1.60	2.19	35.27	0.	-19.21	23.63	0.982	-3.	9	10			
26214 CC0822 RESIDUA	29.	1.00	0.212	0.16	30.3	2.30	0.98	1.56	18.50	0.	0.	23.34	0.970	7.	999	0			
26214 CC0822 RESIDUA	29.	3.52	0.370	0.16	40.3	3.06	1.30	1.92	29.80	0.	-14.18	21.91	0.910	7.	999	0			
26214 ST1015 RESIDUA	29.	1.00	0.070	0.16	34.5	2.55	1.09	1.82	21.84	0.	0.	27.30	1.134	-7.	-29	0			
26214 ST1015 RESIDUA	29.	115.52	0.171	0.16	826.8	61.24	26.04	50.80	916.77	0.	-644.26	410.57	17.054	-1583.	0	58			
26214 ST1010 RESIDUA	29.	1.00	0.100	0.16	30.3	2.25	0.96	1.63	21.13	0.	0.	25.97	1.079	-1.	-15	0			
26214 ST1010 RESIDUA	29.	10.68	0.218	0.16	97.2	7.20	3.06	5.18	89.95	0.	-54.47	50.92	2.115	-110.	0	58			
26214 ST1015 RESIDUA	29.	1.00	0.114	0.16	29.9	2.22	0.94	1.64	20.80	0.	0.	25.60	1.063	1.	-13	0			
26214 ST1015 RESIDUA	29.	6.27	0.228	0.16	59.4	4.40	1.87	3.48	56.54	0.	-29.63	36.65	1.522	-48.	0	57			
26214 DEADV3 RESIDUA	29.	1.00	0.139	0.16	40.5	3.00	1.27	1.77	20.21	0.	0.	26.25	1.090	-6.	-37	0			
26214 DEADV3 RESIDUA	29.	7.13	0.286	0.16	141.9	10.51	4.47	4.56	58.14	0.	-34.51	43.18	1.793	-107.	0	64			
26214 DEHTPM RESIDUA	29.	1.00	0.207	0.16	41.8	3.10	1.32	1.87	18.61	0.	0.	24.89	1.034	-3.	0	55			
26214 DEHTPM RESIDUA	29.	3.01	0.345	0.16	74.7	5.53	2.35	2.81	27.82	0.	-11.30	27.21	1.130	-25.	0	125			
26214 DES0A3 DISTILL	29.	1.00	0.118	0.16	45.2	3.35	1.42	1.90	25.39	0.	0.	32.06	1.332	-27.	0	56			
26214 DES0A3 DISTILL	29.	8.32	0.248	0.16	201.6	14.93	6.35	6.10	85.44	0.	-41.19	71.63	2.975	-224.	0	60			
26214 DES0A3 RESIDUA	29.	1.00	0.118	0.16	45.2	3.35	1.42	1.90	20.71	0.	0.	27.38	1.137	-12.	0	56			
26214 DES0A3 RESIDUA	29.	8.32	0.248	0.16	201.6	14.93	6.35	6.10	69.70	0.	-41.19	55.89	2.322	-174.	0	63			
26214 GTS0AD DISTILL	29.	1.00	0.200	0.16	29.0	2.15	0.91	1.43	23.00	0.	0.	27.45	1.142	-5.	-21	0			
26214 GTS0AD DISTILL	29.	2.50	0.312	0.16	32.0	2.37	1.01	1.55	31.72	0.	-8.43	28.22	1.172	-8.	-29	0			
26214 GTRA08 DISTILL	29.	1.00	0.184	0.16	32.3	2.39	1.02	1.51	23.46	0.	0.	28.38	1.179	-9.	-30	0			
26214 GTRA08 DISTILL	29.	4.18	0.338	0.16	51.8	3.84	1.63	2.10	43.45	0.	-17.92	33.10	1.375	-33.	0	57			
26214 GTRA12 DISTILL	29.	1.00	0.189	0.16	32.5	2.41	1.02	1.51	23.32	0.	0.	28.27	1.174	-9.	-30	0			
26214 GTRA12 DISTILL	29.	4.08	0.345	0.16	52.3	3.87	1.65	2.10	42.20	0.	-17.30	32.51	1.351	-31.	0	57			
26214 GTRA16 DISTILL	29.	1.00	0.191	0.16	33.3	2.47	1.05	1.53	23.28	0.	0.	28.33	1.177	-9.	-32	0			
26214 GTRA16 DISTILL	29.	3.80	0.341	0.16	52.4	3.88	1.65	2.10	40.32	0.	-15.73	32.21	1.338	-30.	0	57			
26214 GTR208 DISTILL	29.	1.00	0.190	0.16	31.3	2.32	0.98	1.48	23.29	0.	0.	28.08	1.166	-8.	-26	0			
26214 GTR208 DISTILL	29.	3.14	0.321	0.16	42.7	3.17	1.35	1.84	36.33	0.	-12.02	30.66	1.274	-21.	0	56			
26214 GTR212 DISTILL	29.	1.00	0.190	0.16	31.8	2.36	1.00	1.50	23.31	0.	0.	28.17	1.170	-8.	-28	0			
26214 GTR212 DISTILL	29.	3.36	0.327	0.16	45.4	3.36	1.43	1.91	37.79	0.	-13.30	31.19	1.296	-24.	0	56			
26214 GTR216 DISTILL	29.	1.00	0.193	0.16	32.5	2.41	1.02	1.51	23.20	0.	0.	28.14	1.169	-8.	-29	0			
26214 GTR216 DISTILL	29.	3.45	0.336	0.16	48.2	3.57	1.52	1.98	37.94	0.	-13.78	31.22	1.297	-25.	0	56			
26214 GTRV08 DISTILL	29.	1.00	0.155	0.16	32.2	2.38	1.01	1.51	24.30	0.	0.	29.21	1.213	-12.	-34	0			
26214 GTRV08 DISTILL	29.	4.99	0.297	0.16	53.7	3.98	1.69	2.18	52.67	0.	-22.44	38.09	1.582	-49.	0	56			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST														
		MW	REQD	RATIO	*10**6		INSNC		ELEC				WORTH	%	PAY				
													15%		BACK				
26214 GTRW12 DISTILL	29.	1.00	0.167	0.16	32.2	2.38	1.01	1.50	23.97	0.	0.	28.87	1.199	-10.	-32	0			
26214 GTRW12 DISTILL	29.	5.06	0.320	0.16	54.0	4.00	1.70	2.18	51.53	0.	-22.85	36.57	1.519	-45.	0	56			
26214 GTRW16 DISTILL	29.	1.00	0.169	0.16	32.7	2.42	1.03	1.52	23.90	0.	0.	28.87	1.199	-11.	-33	0			
26214 GTRW16 DISTILL	29.	4.68	0.319	0.16	53.5	3.96	1.68	2.16	48.60	0.	-20.71	35.69	1.483	-42.	0	56			
26214 GTR308 DISTILL	29.	1.00	0.144	0.16	31.4	2.32	0.99	1.53	24.63	0.	0.	29.44	1.223	-12.	-33	0			
26214 GTR308 DISTILL	29.	3.81	0.257	0.16	43.6	3.23	1.37	1.90	45.54	0.	-15.80	36.24	1.505	-39.	0	56			
26214 GTR312 DISTILL	29.	1.00	0.173	0.16	31.3	2.32	0.99	1.49	23.80	0.	0.	28.59	1.188	-9.	-29	0			
26214 GTR312 DISTILL	29.	4.07	0.314	0.16	46.7	3.46	1.47	1.97	44.08	0.	-17.25	33.73	1.401	-33.	0	56			
26214 GTR316 DISTILL	29.	1.00	0.172	0.16	32.0	2.37	1.01	1.50	23.83	0.	0.	28.70	1.192	-10.	-31	0			
26214 GTR316 DISTILL	29.	4.00	0.311	0.16	47.9	3.55	1.51	2.00	43.77	0.	-16.90	33.93	1.409	-34.	0	56			
26214 FCPADS DISTILL	29.	1.00	0.131	0.16	38.6	2.86	1.21	4.23	24.99	0.	0.	33.29	1.383	-28.	144	0			
26214 FCPADS DISTILL	29.	8.81	0.279	0.16	153.7	11.39	4.84	28.29	85.94	0.	-43.94	86.51	3.593	-252.	0	59			
26214 FCMCDS DISTILL	29.	1.00	0.176	0.16	39.8	2.95	1.25	4.04	23.72	0.	0.	31.96	1.328	-24.	196	0			
26214 FCMCDS DISTILL	29.	6.97	0.360	0.16	133.2	9.87	4.19	21.30	62.70	0.	-33.58	64.48	2.678	-172.	0	60			
26216 ONOCGN COAL-FG	20.	0.	0.	0.22	20.8	1.58	0.67	1.30	6.41	6.47	0.	16.43	1.000	0.	0	0			
26216 STM141 RESIDUA	20.	0.91	0.210	0.22	13.1	0.99	0.42	0.79	13.26	0.61	0.	16.07	0.978	5.	0	0			
26216 STM141 COAL-FG	20.	0.91	0.210	0.22	27.1	2.06	0.87	1.66	7.70	0.61	0.	12.89	0.785	8.	34	3			
26216 STM141 COAL-AF	20.	0.91	0.210	0.22	19.5	1.48	0.63	1.49	7.70	0.61	0.	11.91	0.725	15.	999	0			
26216 STM088 RESIDUA	20.	0.65	0.151	0.22	13.1	0.99	0.42	0.78	12.64	2.24	0.	17.07	1.039	2.	-10	0			
26216 STM088 COAL-FG	20.	0.65	0.151	0.22	25.1	1.90	0.81	1.56	7.34	2.24	0.	13.85	0.843	6.	36	3			
26216 STM088 COAL-AF	20.	0.65	0.151	0.22	18.5	1.40	0.60	1.44	7.34	2.24	0.	13.02	0.792	12.	999	0			
26216 PFBSTM COAL-PF	20.	1.00	0.227	0.22	34.3	2.60	1.11	2.59	7.88	0.	0.	14.18	0.863	0.	15	6			
26216 PFBSTM COAL-PF	20.	1.48	0.285	0.22	32.6	2.48	1.05	2.51	8.60	0.	-1.88	12.76	0.777	6.	22	5			
26216 TISTMT RESIDUA	20.	1.00	0.228	0.22	51.7	3.92	1.67	1.97	13.56	0.	0.	21.12	1.286	-30.	0	69			
26216 TISTMT RESIDUA	20.	1.99	0.331	0.22	79.2	6.01	2.56	2.49	16.05	0.	-3.83	23.27	1.417	-49.	0	83			
26216 TISTMT COAL	20.	1.00	0.228	0.22	72.2	5.48	2.33	3.11	7.87	0.	0.	18.79	1.144	-32.	0	27			
26216 TISTMT COAL	20.	1.99	0.331	0.22	100.3	7.61	3.24	3.56	9.32	0.	-3.83	19.90	1.211	-49.	0	26			
26216 TIHRSG RESIDUA	20.	0.98	0.165	0.22	69.9	5.18	2.20	2.11	14.53	0.13	0.	24.14	1.470	-47.	0	67			
26216 TIHRSG COAL	20.	0.98	0.165	0.22	89.6	6.80	2.89	3.12	8.44	0.13	0.	21.37	1.301	-48.	0	999			
26216 STIRL DISTILL	20.	1.00	0.164	0.22	21.6	1.60	0.68	1.18	17.98	0.	0.	21.43	1.305	-16.	0	56			
26216 STIRL DISTILL	20.	2.38	0.259	0.22	34.4	2.54	1.08	1.34	24.10	0.	-5.34	23.73	1.445	-29.	0	57			
26216 STIRL RESIDUA	20.	1.00	0.164	0.22	21.6	1.60	0.68	1.13	14.67	0.	0.	18.12	1.103	-5.	0	55			
26216 STIRL RESIDUA	20.	2.38	0.259	0.22	34.4	2.55	1.08	1.34	19.66	0.	-5.34	19.30	1.175	-15.	0	61			
26216 STIRL COAL	20.	1.00	0.164	0.22	41.0	3.04	1.29	2.32	8.52	0.	0.	15.17	0.923	-5.	9	9			
26216 STIRL COAL	20.	2.38	0.259	0.22	60.5	4.48	1.91	2.64	11.42	0.	-5.34	15.11	0.920	-14.	7	11			
26216 HEGT85 COAL-AF	20.	1.00	0.053	0.22	59.3	4.50	1.91	2.73	9.66	0.	0.	18.79	1.144	-26.	0	999			
26216 HEGT85 COAL-AF	20.	12.21	0.125	0.22	245.2	18.61	7.91	9.43	46.07	0.	-43.51	38.51	2.344	-177.	0	139			
26216 HEGT60 COAL-AF	20.	1.00	0.069	0.22	56.9	4.32	1.84	2.67	9.49	0.	0.	18.31	1.115	-23.	0	959			
26216 HEGT60 COAL-AF	20.	4.01	0.131	0.22	110.3	8.37	3.56	4.33	18.74	0.	-11.68	23.32	1.420	-65.	0	999			
26216 HEGT00 COAL-AF	20.	1.00	0.084	0.22	53.0	4.02	1.71	2.56	9.34	0.	0.	17.62	1.073	-19.	1	23			
26216 HEGT00 COAL-AF	20.	1.62	0.111	0.22	60.5	4.59	1.95	2.57	11.15	0.	-2.41	17.85	1.087	-23.	1	22			
26216 FCMCCL COAL	20.	1.00	0.198	0.22	50.4	3.92	1.67	2.81	8.17	0.	0.	16.57	1.009	-15.	4	14			
26216 FCMCCL COAL	20.	2.89	0.336	0.22	72.2	5.61	2.39	3.96	11.51	0.	-7.33	16.13	0.982	-25.	5	13			
26216 FCSTCL COAL	20.	1.00	0.206	0.22	49.1	3.82	1.62	2.78	8.10	0.	0.	16.32	0.993	-14.	5	13			

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SENSITIVITY OF CAPITAL COST							PERCENT OF ORIGINAL COST 100										*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****		
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	FORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REGD	GEN/	/HEAT COST	INSNC				ELEC				WORTH	%	PAY				
		MW	REQD	RATIO *10**6									15%		BACK				
26216 FCSTCL COAL	20.	4.35	0.399	0.22	87.0	6.76	2.88	4.82	13.76	0.	-13.01	15.21	0.926	-29.	6	12			
26216 IGGTST COAL	20.	1.00	0.163	0.22	47.9	3.73	1.58	2.40	8.53	0.	0.	16.25	0.989	-13.	5	13			
26216 IGGTST COAL	20.	3.02	0.281	0.22	67.5	5.25	2.23	2.48	12.82	0.	-7.84	14.95	0.910	-19.	7	11			
26216 GTSOAR RESIDUA	20.	1.00	0.166	0.22	18.0	1.33	0.57	1.03	14.64	0.	0.	17.57	1.070	-2.	-24	0			
26216 GTSOAR RESIDUA	20.	3.08	0.288	0.22	26.1	1.93	0.82	1.07	22.12	0.	-8.06	17.89	1.089	-7.	0	58			
26216 GTAC08 RESIDUA	20.	1.00	0.198	0.22	16.6	1.23	0.52	0.99	14.09	0.	0.	16.82	1.024	1.	-10	0			
26216 GTAC08 RESIDUA	20.	2.36	0.310	0.22	20.3	1.50	0.64	0.90	18.23	0.	-5.28	15.99	0.973	2.	999	0			
26216 GTAC12 RESIDUA	20.	1.00	0.194	0.22	17.0	1.26	0.53	1.00	14.14	0.	0.	16.93	1.030	1.	-12	0			
26216 GTAC12 RESIDUA	20.	2.96	0.333	0.22	24.1	1.79	0.76	1.01	20.21	0.	-7.59	16.18	0.985	-0.	11	8			
26216 GTAC16 RESIDUA	20.	1.00	0.191	0.22	17.6	1.30	0.55	1.01	14.21	0.	0.	17.07	1.039	-0.	-15	0			
26216 GTAC16 RESIDUA	20.	3.36	0.341	0.22	27.6	2.05	0.87	1.11	21.69	0.	-9.16	16.56	1.008	-3.	3	17			
26216 GTWC16 RESIDUA	20.	1.00	0.174	0.22	17.7	1.31	0.56	1.02	14.51	0.	0.	17.39	1.058	-1.	-20	0			
26216 GTWC16 RESIDUA	20.	3.50	0.315	0.22	26.7	1.98	0.84	1.09	23.18	0.	-9.71	17.39	1.058	-5.	0	62			
26216 CC1626 RESIDUA	20.	1.00	0.171	0.22	17.8	1.35	0.57	1.12	14.55	0.	0.	17.59	1.071	-2.	-26	0			
26216 CC1626 RESIDUA	20.	5.48	0.353	0.22	35.7	2.71	1.15	1.50	30.28	0.	-17.40	18.24	1.111	-13.	0	76			
26216 CC1622 RESIDUA	20.	1.00	0.180	0.22	17.7	1.34	0.57	1.11	14.40	0.	0.	17.42	1.060	-2.	-22	0			
26216 CC1622 RESIDUA	20.	4.93	0.361	0.22	35.6	2.70	1.15	1.46	27.61	0.	-15.25	17.66	1.075	-11.	0	***			
26216 CC1222 RESIDUA	20.	1.00	0.182	0.22	17.2	1.30	0.55	1.10	14.37	0.	0.	17.33	1.053	-1.	-19	0			
26216 CC1222 RESIDUA	20.	4.91	0.364	0.22	33.7	2.56	1.09	1.43	27.38	0.	-15.16	17.30	1.053	-9.	0	999			
26216 CC0822 RESIDUA	20.	1.00	0.195	0.22	17.2	1.30	0.55	1.10	14.14	0.	0.	17.10	1.041	-0.	-16	0			
26216 CC0822 RESIDUA	20.	3.90	0.365	0.22	27.9	2.12	0.90	1.26	23.14	0.	-11.25	16.17	0.984	-3.	8	10			
26216 STIG15 RESIDUA	20.	1.00	0.064	0.22	22.1	1.64	0.70	1.31	16.43	0.	0.	20.07	1.222	-12.	0	56			
26216 STIG15 RESIDUA	20.	131.85	0.171	0.22	651.1	48.23	20.50	39.96	721.66	0.	-507.70	322.65	19.642	-1258.	0	58			
26216 STIG10 RESIDUA	20.	1.00	0.092	0.22	18.4	1.37	0.58	1.16	15.94	0.	0.	19.05	1.160	-7.	-50	0			
26216 STIG10 RESIDUA	20.	12.19	0.218	0.22	72.6	5.38	2.29	3.83	70.80	0.	-43.43	38.87	2.367	-95.	0	58			
26216 STIG1S RESIDUA	20.	1.00	0.105	0.22	18.1	1.34	0.57	1.16	15.72	0.	0.	18.80	1.144	-6.	-43	0			
26216 STIG1S RESIDUA	20.	7.15	0.223	0.22	44.3	3.28	1.40	2.51	44.50	0.	-23.88	27.82	1.694	-47.	0	58			
26216 DEADV3 RESIDUA	20.	1.00	0.128	0.22	24.3	1.80	0.77	1.24	15.30	0.	0.	19.11	1.164	-10.	0	56			
26216 DEADV3 RESIDUA	20.	8.14	0.286	0.22	106.9	7.91	3.37	3.32	45.77	0.	-27.71	32.66	1.988	-91.	0	64			
26216 DEHTPM RESIDUA	20.	1.00	0.191	0.22	23.9	1.77	0.75	1.28	14.20	0.	0.	18.00	1.096	-6.	0	57			
26216 DEHTPM RESIDUA	20.	3.43	0.345	0.22	53.4	3.96	1.68	1.92	21.90	0.	-9.44	20.01	1.218	-26.	0	85			
26216 DESOA3 DISTILL	20.	1.00	0.108	0.22	27.6	2.05	0.87	1.33	19.19	0.	0.	23.43	1.426	-25.	0	56			
26216 DESOA3 DISTILL	20.	9.50	0.248	0.22	154.0	11.40	4.85	4.54	67.26	0.	-32.97	55.08	3.353	-183.	0	60			
26216 DESOA3 RESIDUA	20.	1.00	0.108	0.22	27.6	2.05	0.87	1.33	15.65	0.	0.	19.90	1.211	-14.	0	57			
26216 DESOA3 RESIDUA	20.	9.50	0.248	0.22	154.0	11.40	4.85	4.54	54.87	0.	-32.97	42.69	2.599	-144.	0	63			
26216 GTSOAD DISTILL	20.	1.00	0.185	0.22	16.1	1.19	0.51	0.98	17.54	0.	0.	20.22	1.231	-9.	-42	0			
26216 GTSOAD DISTILL	20.	2.85	0.312	0.22	21.3	1.58	0.67	0.94	24.97	0.	-7.19	20.97	1.276	-14.	999	0			
26216 GTRA08 DISTILL	20.	1.00	0.170	0.22	18.6	1.38	0.59	1.04	17.86	0.	0.	20.86	1.270	-13.	-82	0			
26216 GTRA08 DISTILL	20.	4.78	0.338	0.22	38.1	2.82	1.20	1.41	34.20	0.	-14.65	24.97	1.520	-35.	0	57			
26216 GTRA12 DISTILL	20.	1.00	0.175	0.22	18.7	1.39	0.59	1.04	17.76	0.	0.	20.78	1.265	-12.	-84	0			
26216 GTRA12 DISTILL	20.	4.65	0.345	0.22	36.2	2.68	1.14	1.36	33.22	0.	-14.17	24.23	1.475	-31.	0	57			
26216 GTRA16 DISTILL	20.	1.00	0.176	0.22	19.3	1.43	0.61	1.06	17.73	0.	0.	20.83	1.268	-13.	107	0			
26216 GTRA16 DISTILL	20.	4.33	0.341	0.22	36.4	2.69	1.15	1.35	31.74	0.	-12.93	24.00	1.461	-31.	0	57			
26216 GTR208 DISTILL	20.	1.00	0.176	0.22	17.8	1.32	0.56	1.02	17.74	0.	0.	20.64	1.257	-12.	-64	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC					WORTH	%	PAY			
		MW												15%		BACK			
26216 GTR208 DISTILL	20.	3.58	0.321	0.22	28.3	2.10	0.89	1.13	28.60	0.	-10.01	22.71	1.383	-23.	0	56			
26216 GTR212 DISTILL	20.	1.00	0.175	0.22	18.2	1.35	0.57	1.03	17.75	0.	0.	20.71	1.261	-12.	-72	0			
26216 GTR212 DISTILL	20.	3.84	0.327	0.22	30.6	2.27	0.96	1.20	29.74	0.	-11.02	23.15	1.409	-25.	0	57			
26216 GTR216 DISTILL	20.	1.00	0.178	0.22	18.7	1.38	0.59	1.04	17.68	0.	0.	20.69	1.260	-12.	-82	0			
26216 GTR216 DISTILL	20.	3.94	0.336	0.22	32.8	2.43	1.03	1.25	29.87	0.	-11.40	23.18	1.411	-26.	0	57			
26216 GTRW08 DISTILL	20.	1.00	0.143	0.22	18.6	1.38	0.59	1.05	18.44	0.	0.	21.45	1.306	-14.	-92	0			
26216 GTRW08 DISTILL	20.	5.69	0.297	0.22	37.9	2.81	1.19	1.43	41.46	0.	-18.21	28.69	1.746	-46.	0	57			
26216 GTRW12 DISTILL	20.	1.00	0.154	0.22	18.6	1.38	0.59	1.04	18.21	0.	0.	21.21	1.291	-14.	-87	0			
26216 GTRW12 DISTILL	20.	5.78	0.320	0.22	38.1	2.82	1.20	1.44	40.57	0.	-18.53	27.49	1.674	-42.	0	57			
26216 GTRW16 DISTILL	20.	1.00	0.156	0.22	19.0	1.41	0.60	1.05	18.16	0.	0.	21.22	1.292	-14.	102	0			
26216 GTRW16 DISTILL	20.	5.34	0.319	0.22	37.7	2.79	1.19	1.41	38.26	0.	-16.85	26.80	1.631	-40.	0	57			
26216 GTR308 DISTILL	20.	1.00	0.133	0.22	17.9	1.33	0.57	1.03	18.66	0.	0.	21.59	1.314	-15.	-78	0			
26216 GTR308 DISTILL	20.	4.35	0.257	0.22	31.2	2.31	0.98	1.24	35.85	0.	-12.99	27.39	1.668	-39.	0	56			
26216 GTR312 DISTILL	20.	1.00	0.159	0.22	18.0	1.33	0.57	1.03	18.09	0.	0.	21.01	1.279	-13.	-70	0			
26216 GTR312 DISTILL	20.	4.64	0.314	0.22	31.9	2.36	1.01	1.25	34.70	0.	-14.13	25.19	1.534	-32.	0	57			
26216 GTR316 DISTILL	20.	1.00	0.158	0.22	18.4	1.37	0.58	1.04	18.11	0.	0.	21.10	1.284	-13.	-82	0			
26216 GTR316 DISTILL	20.	4.57	0.311	0.22	32.9	2.44	1.04	1.28	34.46	0.	-13.85	25.36	1.544	-33.	0	57			
26216 FCPADS DISTILL	20.	1.00	0.121	0.22	23.0	1.70	0.72	2.90	18.91	0.	0.	24.24	1.476	-25.	0	56			
26216 FCPADS DISTILL	20.	10.06	0.279	0.22	116.5	8.63	3.67	21.96	67.65	0.	-35.14	86.76	4.064	-205.	0	59			
26216 FCMCDS DISTILL	20.	1.00	0.162	0.22	23.8	1.76	0.75	2.77	18.03	0.	0.	23.31	1.419	-23.	0	57			
26216 FCMCDS DISTILL	20.	7.96	0.360	0.22	99.9	7.40	3.15	16.44	49.36	0.	-26.99	49.36	3.005	-142.	0	60			
26217 ONOCGN COAL-FG	31.	0.	0.	0.58	14.8	1.13	0.48	0.97	3.82	10.12	0.	16.52	1.000	0.	0	0			
26217 STM141 RESIDUA	31.	0.31	0.119	0.58	9.2	0.70	0.30	0.62	7.78	6.94	0.	16.35	0.990	3.	-2	0			
26217 STM141 COAL-FG	31.	0.31	0.119	0.58	18.6	1.41	0.60	1.22	4.52	6.94	0.	14.70	0.890	4.	30	4			
26217 STM141 COAL-AF	31.	0.31	0.119	0.58	13.9	1.06	0.45	1.09	4.52	6.94	0.	14.06	0.851	8.	999	0			
26217 STM088 RESIDUA	31.	0.22	0.083	0.58	8.2	0.62	0.26	0.59	7.42	7.89	0.	16.79	1.017	2.	-8	0			
26217 STM088 COAL-FG	31.	0.22	0.083	0.58	17.1	1.30	0.55	1.16	4.31	7.89	0.	15.21	0.921	3.	34	3			
26217 STM088 COAL-AF	31.	0.22	0.083	0.58	13.1	1.00	0.42	1.05	4.31	7.89	0.	14.68	0.889	7.	999	0			
26217 PFBSTM COAL-PF	31.	0.53	0.197	0.58	22.9	1.74	0.74	1.73	5.05	4.74	0.	13.99	0.847	4.	22	5			
26217 TISTMT RESIDUA	31.	0.72	0.268	0.58	53.1	4.03	1.71	1.76	9.42	2.84	0.	19.76	1.196	-28.	0	***			
26217 TISTMT COAL	31.	0.72	0.268	0.58	67.5	5.12	2.18	2.50	5.47	2.84	0.	18.11	1.096	-30.	2	20			
26217 TIHRSG RESIDUA	31.	0.37	0.103	0.58	47.5	3.52	1.49	1.48	8.66	6.34	0.	21.50	1.301	-31.	0	67			
26217 TIHRSG COAL	31.	0.37	0.103	0.58	61.0	4.63	1.97	2.19	5.03	6.34	0.	20.16	1.220	-34.	0	999			
26217 STIRL DISTILL	31.	0.90	0.244	0.58	20.9	1.55	0.66	0.92	14.37	0.96	0.	18.46	1.118	-9.	0	59			
26217 STIRL RESIDUA	31.	0.90	0.244	0.58	21.0	1.55	0.66	0.92	11.72	0.96	0.	15.82	0.958	-0.	13	7			
26217 STIRL COAL	31.	0.90	0.244	0.58	36.2	2.68	1.14	1.75	6.81	0.96	0.	13.34	0.808	0.	15	7			
26217 HEGT85 COAL-AF	31.	1.00	0.086	0.58	68.5	5.20	2.21	2.92	8.90	0.	0.	19.24	1.165	-34.	0	30			
26217 HEGT85 COAL-AF	31.	4.65	0.125	0.58	169.9	12.89	5.48	6.38	27.46	0.	-22.18	30.03	1.818	-117.	0	***			
26217 HEGT60 COAL-AF	31.	1.00	0.114	0.58	63.5	4.82	2.05	2.75	8.63	0.	0.	18.25	1.105	-29.	1	22			
26217 HEGT60 COAL-AF	31.	1.53	0.131	0.58	76.6	5.81	2.47	2.97	11.17	0.	-3.20	19.22	1.164	-38.	0	26			
26217 HEGT00 COAL-AF	31.	0.62	0.085	0.58	41.9	3.18	1.35	1.78	6.65	3.87	0.	16.83	1.019	-14.	4	13			
26217 FCMCCL COAL	31.	1.00	0.324	0.58	49.4	3.84	1.63	2.77	6.58	0.	0.	14.83	0.898	-12.	8	10			
26217 FCMCCL COAL	31.	1.10	0.336	0.58	49.7	3.86	1.64	2.65	6.86	0.	-0.61	14.40	0.872	-11.	9	9			
26217 FCSTCL COAL	31.	1.00	0.336	0.58	50.0	3.89	1.65	2.85	6.47	0.	0.	14.86	0.899	-12.	8	10			

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS							
SYSTEM	FUEL	REQD	GEN/	/HEAT COST									WORTH	%	PAY				
		MW	REQD	RATIO *10**6		INSNC	ELEC						15%		BACK				
26217 FCSTCL	COAL	31.	1.61	0.394	0.58	59.0	4.59	1.95	3.20	8.08	0.	-3.69	14.13	0.856	-15.	9	10		
26217 IGGTST	COAL	31.	1.00	0.264	0.58	46.9	3.64	1.55	2.06	7.17	0.	0.	14.42	0.873	-9.	9	9		
26217 IGGTST	COAL	31.	1.11	0.274	0.58	46.9	3.64	1.55	1.85	7.53	0.	-0.65	13.92	0.843	-8.	10	9		
26217 GTSOAR	RESIDUA	31.	1.00	0.272	0.58	17.5	1.30	0.55	0.92	12.22	0.	0.	14.99	0.907	4.	40	3		
26217 GTSOAR	RESIDUA	31.	1.17	0.288	0.58	17.8	1.32	0.56	0.79	13.19	0.	-1.04	14.82	0.897	4.	39	3		
26217 GTAC08	RESIDUA	31.	0.90	0.291	0.58	13.8	1.02	0.43	0.67	10.87	1.02	0.	14.01	0.848	9.	999	0		
26217 GTAC12	RESIDUA	31.	1.00	0.318	0.58	16.1	1.20	0.51	0.87	11.44	0.	0.	14.01	0.848	7.	131	1		
26217 GTAC16	RESIDUA	31.	1.13	0.333	0.58	16.2	1.20	0.51	0.74	12.05	0.	-0.76	13.73	0.831	8.	136	1		
26217 GTAC16	RESIDUA	31.	1.00	0.312	0.58	17.4	1.29	0.55	0.93	11.54	0.	0.	14.30	0.866	6.	58	2		
26217 GTAC16	RESIDUA	31.	1.28	0.341	0.58	18.5	1.37	0.58	0.81	12.93	0.	-1.70	13.99	0.847	6.	45	3		
26217 GTWC16	RESIDUA	31.	1.00	0.284	0.58	17.2	1.28	0.54	0.93	12.01	0.	0.	14.76	0.894	5.	49	2		
26217 GTWC16	RESIDUA	31.	1.33	0.315	0.58	18.4	1.36	0.58	0.81	13.82	0.	-2.03	14.54	0.881	5.	38	3		
26217 CC1626	RESIDUA	31.	1.00	0.279	0.58	18.1	1.38	0.59	1.10	12.09	0.	0.	15.15	0.917	3.	27	4		
26217 CC1626	RESIDUA	31.	2.03	0.349	0.58	24.1	1.83	0.78	1.12	17.77	0.	-6.26	15.24	0.923	-0.	14	7		
26217 CC1622	RESIDUA	31.	1.00	0.293	0.58	18.1	1.38	0.58	1.08	11.86	0.	0.	14.90	0.902	3.	31	4		
26217 CC1622	RESIDUA	31.	1.63	0.356	0.58	23.4	1.78	0.75	1.07	16.21	0.	-5.01	14.80	0.896	1.	17	6		
26217 CC1222	RESIDUA	31.	1.00	0.296	0.58	17.4	1.32	0.56	1.07	11.81	0.	0.	14.77	0.894	4.	39	3		
26217 CC1222	RESIDUA	31.	1.81	0.359	0.58	22.2	1.68	0.72	1.05	16.07	0.	-4.95	14.58	0.883	3.	20	5		
26217 CC0822	RESIDUA	31.	1.00	0.317	0.58	16.9	1.29	0.55	1.04	11.45	0.	0.	14.33	0.867	6.	56	2		
26217 CC0822	RESIDUA	31.	1.44	0.360	0.58	18.7	1.42	0.60	0.94	13.58	0.	-2.65	13.89	0.841	6.	40	3		
26217 STIG15	RESIDUA	31.	1.00	0.105	0.58	18.8	1.39	0.59	1.32	15.01	0.	0.	18.31	1.109	-7.	0	58		
26217 STIG15	RESIDUA	31.	50.22	0.171	0.58	396.0	29.33	12.47	24.36	430.17	0.	-298.87	197.46	11.955	-747.	0	58		
26217 STIG10	RESIDUA	31.	1.00	0.151	0.58	17.7	1.31	0.56	1.19	14.25	0.	0.	17.30	1.048	-4.	0	60		
26217 STIG10	RESIDUA	31.	4.64	0.218	0.58	44.5	3.30	1.40	2.46	42.21	0.	-22.13	27.24	1.649	-47.	0	59		
26217 STIG15	RESIDUA	31.	1.00	0.171	0.58	17.1	1.27	0.54	1.18	13.90	0.	0.	16.88	1.022	-2.	0	68		
26217 STIG15	RESIDUA	31.	2.72	0.228	0.58	27.0	2.00	0.85	1.64	26.53	0.	-10.47	20.55	1.244	-18.	0	59		
26217 DEADV3	RESIDUA	31.	1.00	0.210	0.58	26.7	1.97	0.84	1.28	13.25	0.	0.	17.35	1.050	-8.	0	999		
26217 DEADV3	RESIDUA	31.	3.10	0.286	0.58	64.6	4.79	2.04	2.16	27.28	0.	-12.76	23.50	1.423	-45.	0	71		
26217 DEHTPM	RESIDUA	31.	1.00	0.313	0.58	27.4	2.03	0.86	1.31	11.53	0.	0.	15.73	0.952	-3.	10	9		
26217 DEHTPM	RESIDUA	31.	1.31	0.345	0.58	32.4	2.40	1.02	1.29	13.05	0.	-1.87	15.90	0.962	-6.	8	10		
26217 DESO3A3	DISTILL	31.	1.00	0.177	0.58	31.8	2.36	1.00	1.42	16.92	0.	0.	21.70	1.314	-24.	0	59		
26217 DESO3A3	DISTILL	31.	3.62	0.248	0.58	92.8	6.88	2.92	2.90	40.09	0.	-15.90	36.89	2.234	-100.	0	61		
26217 DESO3A3	RESIDUA	31.	1.00	0.177	0.58	31.8	2.36	1.00	1.42	13.80	0.	0.	18.58	1.125	-14.	0	78		
26217 DESO3A3	RESIDUA	31.	3.62	0.248	0.58	92.8	6.88	2.92	2.90	32.71	0.	-15.90	29.51	1.786	-77.	0	66		
26217 GTSO3AD	DISTILL	31.	1.00	0.303	0.58	14.7	1.09	0.46	0.82	14.34	0.	0.	16.71	1.012	-0.	-24	0		
26217 GTSO3AD	DISTILL	31.	1.09	0.312	0.58	14.4	1.07	0.45	0.70	14.88	0.	-0.52	16.58	1.004	0.	-10	0		
26217 GTRA08	DISTILL	31.	1.00	0.279	0.58	19.1	1.41	0.60	1.00	14.84	0.	0.	17.86	1.081	-6.	0	59		
26217 GTRA08	DISTILL	31.	1.82	0.338	0.58	24.3	1.80	0.77	0.98	20.39	0.	-4.98	18.96	1.148	-12.	0	60		
26217 GTRA12	DISTILL	31.	1.00	0.286	0.58	19.3	1.43	0.61	1.01	14.69	0.	0.	17.73	1.074	-6.	0	59		
26217 GTRA12	DISTILL	31.	1.77	0.345	0.58	24.5	1.81	0.77	0.99	19.80	0.	-4.69	18.68	1.131	-11.	0	61		
26217 GTRA16	DISTILL	31.	1.00	0.288	0.58	20.1	1.49	0.63	1.02	14.64	0.	0.	17.78	1.077	-6.	0	60		
26217 GTRA16	DISTILL	31.	1.65	0.341	0.58	24.6	1.82	0.78	0.98	18.92	0.	-3.95	18.55	1.123	-11.	0	62		
26217 GTR208	DISTILL	31.	1.00	0.288	0.58	17.7	1.31	0.56	0.95	14.65	0.	0.	17.46	1.057	-4.	0	58		
26217 GTR208	DISTILL	31.	1.36	0.321	0.58	19.2	1.42	0.61	0.83	17.05	0.	-2.21	17.70	1.072	-6.	0	59		

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ORIGINAL PAGE IS
OF POOR QUALITY

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES QANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK										
26217 GTR212 DISTILL	31.	1.00	0.287	0.58	18.3	1.36	0.58	0.97	14.67	0.	0.	17.58	1.064	-5.	0	59			
26217 GTR212 DISTILL	31.	1.46	0.327	0.58	20.8	1.54	0.65	0.88	17.73	0.	-2.81	17.99	1.089	-7.	0	60			
26217 GTR216 DISTILL	31.	1.00	0.292	0.58	19.1	1.41	0.60	0.99	14.56	0.	0.	17.56	1.063	-5.	0	60			
26217 GTR216 DISTILL	31.	1.50	0.336	0.58	22.1	1.64	0.70	0.91	17.80	0.	-3.03	18.01	1.091	-8.	0	61			
26217 GTRW08 DISTILL	31.	1.00	0.235	0.58	19.0	1.41	0.60	1.02	15.74	0.	0.	18.77	1.136	-9.	0	57			
26217 GTRW08 DISTILL	31.	2.17	0.297	0.58	26.2	1.94	0.82	1.06	24.71	0.	-7.10	21.44	1.298	-21.	0	58			
26217 GTRW12 DISTILL	31.	1.00	0.252	0.58	19.0	1.41	0.60	1.01	15.39	0.	0.	18.41	1.115	-8.	0	58			
26217 GTRW12 DISTILL	31.	2.20	0.320	0.58	26.3	1.95	0.83	1.06	24.18	0.	-7.29	20.73	1.255	-18.	0	58			
26217 GTRW16 DISTILL	31.	1.00	0.256	0.58	19.5	1.45	0.61	1.02	15.31	0.	0.	18.39	1.114	-8.	0	58			
26217 GTRW16 DISTILL	31.	2.04	0.319	0.58	26.1	1.93	0.82	1.04	22.81	0.	-6.29	20.32	1.230	-17.	0	59			
26217 GTR308 DISTILL	31.	1.00	0.217	0.58	18.0	1.33	0.57	0.98	16.10	0.	0.	18.08	1.149	-9.	0	57			
26217 GTR308 DISTILL	31.	1.66	0.257	0.58	21.4	1.58	0.67	0.92	21.37	0.	-3.95	20.56	1.245	-16.	0	57			
26217 GTR312 DISTILL	31.	1.00	0.261	0.58	18.0	1.33	0.57	0.98	15.20	0.	0.	18.08	1.095	-6.	0	57			
26217 GTR312 DISTILL	31.	1.77	0.314	0.58	22.0	1.63	0.69	0.93	20.68	0.	-4.66	19.27	1.167	-12.	0	58			
26217 GTR316 DISTILL	31.	1.00	0.259	0.58	18.6	1.38	0.59	0.99	15.23	0.	0.	18.19	1.102	-7.	0	58			
26217 GTR316 DISTILL	31.	1.74	0.311	0.58	22.7	1.68	0.72	0.95	20.54	0.	-4.50	19.39	1.174	-12.	0	58			
26217 FCPADS DISTILL	31.	1.00	0.198	0.58	24.9	1.84	0.78	3.95	16.49	0.	0.	23.07	1.396	-25.	0	59			
26217 FCPADS DISTILL	31.	3.83	0.279	0.58	70.3	5.21	2.22	13.18	40.32	0.	-17.19	43.74	2.648	-113.	0	60			
26217 FCMCDS DISTILL	31.	1.00	0.265	0.58	25.8	1.91	0.81	3.74	15.11	0.	0.	21.58	1.306	-21.	0	60			
26217 FCMCDS DISTILL	31.	3.03	0.360	0.58	60.4	4.47	1.90	9.88	29.42	0.	-12.33	33.35	2.019	-75.	0	61			
26218 ONOCGN COAL-FG	15.	0.	0.	0.21	17.9	1.36	0.58	1.14	5.09	4.85	0.	13.02	1.000	0.	0	0			
26218 STM141 RESIDUA	15.	0.91	0.204	0.21	11.2	0.85	0.36	0.71	10.45	0.41	0.	12.78	0.982	4.	-2	0			
26218 STM141 COAL-FG	15.	0.91	0.204	0.21	22.9	1.74	0.74	1.44	6.07	0.41	0.	10.41	0.799	6.	32	3			
26218 STM141 COAL-AF	15.	0.91	0.204	0.21	16.8	1.27	0.54	1.29	6.07	0.41	0.	9.59	0.737	11.	999	0			
26218 STM088 RESIDUA	15.	0.65	0.145	0.21	10.0	0.76	0.32	0.67	9.97	1.70	0.	13.41	1.030	3.	-9	0			
26218 STM088 COAL-FG	15.	0.65	0.145	0.21	21.1	1.60	0.68	1.36	5.79	1.70	0.	11.13	0.855	4.	35	3			
26218 STM088 COAL-AF	15.	0.65	0.145	0.21	15.8	1.20	0.51	1.25	5.79	1.70	0.	10.45	0.802	9.	999	0			
26218 PFBSTM COAL-PF	15.	1.00	0.218	0.21	29.3	2.22	0.94	2.21	6.20	0.	0.	11.58	0.890	-1.	13	7			
26218 PFBSTM COAL-PF	15.	1.52	0.280	0.21	27.8	2.11	0.90	2.12	6.78	0.	-1.52	10.39	0.798	3.	20	5			
26218 TISTMT RESIDUA	15.	1.00	0.219	0.21	42.6	3.23	1.37	1.69	10.66	0.	0.	16.97	1.303	-24.	0	68			
26218 TISTMT RESIDUA	15.	2.05	0.327	0.21	66.2	5.03	2.14	2.13	12.65	0.	-3.06	18.89	1.150	-42.	0	80			
26218 TISTMT COAL	15.	1.00	0.219	0.21	59.9	4.54	1.93	2.67	6.19	0.	0.	15.34	1.178	-27.	0	999			
26218 TISTMT COAL	15.	2.05	0.327	0.21	84.0	6.38	2.71	3.04	7.34	0.	-3.06	16.41	1.260	-42.	0	999			
26218 TIHRSG RESIDUA	15.	1.00	0.162	0.21	57.9	4.29	1.82	1.88	11.44	0.	0.	19.44	1.493	-39.	0	66			
26218 TIHRSG RESIDUA	15.	1.04	0.166	0.21	58.8	4.36	1.85	1.80	11.55	0.	-0.11	19.45	1.494	-39.	0	67			
26218 TIHRSG COAL	15.	1.00	0.162	0.21	75.3	5.72	2.43	2.83	6.64	0.	0.	17.62	1.353	-42.	0	999			
26218 TIHRSG COAL	15.	1.04	0.166	0.21	75.5	5.73	2.44	2.66	6.70	0.	-0.11	17.42	1.338	-41.	0	999			
26218 STIRL DISTILL	15.	1.00	0.158	0.21	17.2	1.27	0.54	1.02	14.09	0.	0.	16.92	1.300	-12.	159	0			
26218 STIRL DISTILL	15.	2.52	0.259	0.21	27.6	2.04	0.87	1.13	19.16	0.	-4.42	18.78	1.442	-22.	0	57			
26218 STIRL RESIDUA	15.	1.00	0.158	0.21	17.2	1.28	0.54	1.02	11.50	0.	0.	14.33	1.101	-4.	-61	0			
26218 STIRL RESIDUA	15.	2.52	0.259	0.21	27.6	2.04	0.87	1.13	15.63	0.	-4.42	15.26	1.172	-11.	0	60			
26218 STIRL COAL	15.	1.00	0.158	0.21	33.8	2.51	1.07	2.00	6.67	0.	0.	12.24	0.940	-5.	8	10			
26218 STIRL COAL	15.	2.52	0.259	0.21	48.9	3.62	1.54	2.21	9.07	0.	-4.42	12.04	0.924	-11.	7	11			
26218 HEGT85 COAL-AF	15.	1.00	0.051	0.21	49.2	3.73	1.59	2.32	7.53	0.	0.	15.17	1.165	-22.	0	999			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC							WORTH	%	PAY	BACK
		MW														15%			
26218 HEGT85	COAL-AF	15.	12.94	0.125	0.21	208.3	15.81	6.72	7.92	36.62	0.	-34.76	32.31	2.481	-152.	0	121		
26218 HEGT60	COAL-AF	15.	1.00	0.067	0.21	47.3	3.59	1.53	2.27	7.40	0.	0.	14.79	1.136	-20.	0	999		
26218 HEGT60	COAL-AF	15.	4.25	0.131	0.21	93.8	7.12	3.03	3.66	14.90	0.	-9.45	19.25	1.478	-56.	0	999		
26218 HEGT00	COAL-AF	15.	1.00	0.081	0.21	44.2	3.35	1.43	2.18	7.29	0.	0.	14.25	1.094	-16.	0	28		
26218 HEGT00	COAL-AF	15.	1.72	0.111	0.21	51.4	3.90	1.66	2.18	8.86	0.	-2.09	14.51	1.115	-21.	0	27		
26218 FCMCCL	COAL	15.	1.00	0.191	0.21	42.1	3.27	1.39	2.37	6.42	0.	0.	13.45	1.033	-13.	3	16		
26218 FCMCCL	COAL	15.	3.06	0.336	0.21	61.1	4.75	2.02	3.31	9.15	0.	-6.00	13.23	1.016	-22.	4	14		
26218 FCSTCL	COAL	15.	1.00	0.198	0.21	41.0	3.19	1.36	2.37	6.36	0.	0.	13.28	1.020	-12.	4	15		
26218 FCSTCL	COAL	15.	4.54	0.396	0.21	73.1	5.69	2.42	4.01	10.85	0.	-10.30	12.66	0.972	-26.	5	13		
26218 IGGTST	COAL	15.	1.00	0.156	0.21	40.4	3.14	1.34	2.11	6.69	0.	0.	13.28	1.020	-12.	4	15		
26218 IGGTST	COAL	15.	3.14	0.278	0.21	57.3	4.46	1.89	2.17	10.11	0.	-6.22	12.42	0.954	-18.	6	12		
26218 GTSQAR	RESIDUA	15.	1.00	0.160	0.21	15.1	1.12	0.47	0.91	11.47	0.	0.	13.98	1.073	-1.	-22	0		
26218 GTSQAR	RESIDUA	15.	3.26	0.288	0.21	22.0	1.63	0.69	0.94	17.58	0.	-6.58	14.27	1.096	-6.	0	58		
26218 GTAC08	RESIDUA	15.	1.00	0.190	0.21	13.9	1.03	0.44	0.87	11.06	0.	0.	13.39	1.029	1.	-11	0		
26218 GTAC08	RESIDUA	15.	2.50	0.310	0.21	17.1	1.26	0.54	0.79	14.49	0.	-4.37	12.71	0.976	2.	999	0		
26218 GTAC12	RESIDUA	15.	1.00	0.187	0.21	14.1	1.05	0.44	0.88	11.10	0.	0.	13.47	1.035	1.	-12	0		
26218 GTAC12	RESIDUA	15.	3.13	0.333	0.21	20.2	1.50	0.64	0.88	16.06	0.	-6.21	12.87	0.988	-0.	11	8		
26218 GTAC16	RESIDUA	15.	1.00	0.184	0.21	14.6	1.08	0.46	0.89	11.15	0.	0.	13.58	1.043	0.	-14	0		
26218 GTAC16	RESIDUA	15.	3.56	0.341	0.21	23.1	1.71	0.73	0.96	17.24	0.	-7.45	13.19	1.013	-3.	1	22		
26218 GTWC16	RESIDUA	15.	1.00	0.167	0.21	14.8	1.10	0.47	0.90	11.37	0.	0.	13.83	1.063	-1.	-19	0		
26218 GTWC16	RESIDUA	15.	3.71	0.315	0.21	22.6	1.67	0.71	0.96	18.43	0.	-7.89	13.88	1.066	-5.	0	61		
26218 CC1626	RESIDUA	15.	1.00	0.165	0.21	14.9	1.13	0.48	1.00	11.41	0.	0.	14.02	1.077	-2.	-24	0		
26218 CC1626	RESIDUA	15.	5.73	0.351	0.21	29.9	2.27	0.97	1.31	23.87	0.	-13.75	14.67	1.127	-11.	0	72		
26218 CC1622	RESIDUA	15.	1.00	0.173	0.21	14.7	1.11	0.47	0.99	11.30	0.	0.	13.87	1.065	-1.	-20	0		
26218 CC1622	RESIDUA	15.	5.15	0.358	0.21	29.5	2.24	0.95	1.27	21.77	0.	-12.07	14.16	1.087	-9.	0	112		
26218 CC1222	RESIDUA	15.	1.00	0.175	0.21	14.3	1.08	0.46	0.99	11.27	0.	0.	13.80	1.060	-1.	-18	0		
26218 CC1222	RESIDUA	15.	5.12	0.361	0.21	27.9	2.12	0.90	1.25	21.59	0.	-11.99	13.86	1.065	-7.	0	717		
26218 CC0822	RESIDUA	15.	1.00	0.187	0.21	14.4	1.09	0.46	0.98	11.10	0.	0.	13.64	1.048	-0.	-16	0		
26218 CC0822	RESIDUA	15.	4.06	0.363	0.21	23.3	1.77	0.75	1.10	18.24	0.	-9.91	12.96	0.995	-2.	6	12		
26218 STIG15	RESIDUA	15.	1.00	0.062	0.21	14.9	1.10	0.47	1.04	12.81	0.	0.	15.43	1.185	-6.	-41	0		
26218 STIG15	RESIDUA	15.	139.72	0.171	0.21	520.8	38.57	16.40	32.03	573.57	0.	-403.69	256.88	19.729	-1002.	0	58		
26218 STIG10	RESIDUA	15.	1.00	0.089	0.21	14.3	1.06	0.45	0.98	12.45	0.	0.	14.95	1.148	-4.	-31	0		
26218 STIG10	RESIDUA	15.	12.92	0.218	0.21	55.3	4.10	1.74	3.07	56.27	0.	-34.69	30.49	2.342	-72.	0	58		
26218 STIG15	RESIDUA	15.	1.00	0.101	0.21	14.1	1.04	0.44	0.98	12.28	0.	0.	14.75	1.133	-3.	-27	0		
26218 STIG15	RESIDUA	15.	7.58	0.228	0.21	37.3	2.76	1.17	2.12	35.37	0.	-19.15	22.28	1.711	-38.	0	58		
26218 DEADV3	RESIDUA	15.	1.00	0.124	0.21	21.1	1.56	0.67	1.11	11.97	0.	0.	15.31	1.176	-8.	0	57		
26218 DEADV3	RESIDUA	15.	8.63	0.286	0.21	85.5	6.33	2.69	2.74	36.38	0.	-22.20	25.93	1.992	-72.	0	64		
26218 DEHTPM	RESIDUA	15.	1.00	0.184	0.21	19.0	1.41	0.60	1.10	11.14	0.	0.	14.25	1.094	-4.	0	56		
26218 DEHTPM	RESIDUA	15.	3.64	0.345	0.21	42.8	3.17	1.35	1.61	17.40	0.	-7.68	15.85	1.218	-20.	0	82		
26218 DESOA3	DISTILL	15.	1.00	0.104	0.21	20.9	1.55	0.66	1.11	15.00	0.	0.	18.30	1.406	-18.	0	56		
26218 DESOA3	DISTILL	15.	10.07	0.248	0.21	123.0	9.11	3.87	3.71	53.46	0.	-26.38	43.77	3.362	-145.	0	60		
26218 DESOA3	RESIDUA	15.	1.00	0.104	0.21	20.9	1.55	0.66	1.11	12.23	0.	0.	15.54	1.194	-9.	0	56		
26218 DESOA3	RESIDUA	15.	10.07	0.248	0.21	123.0	9.11	3.87	3.71	43.61	0.	-26.38	33.92	2.605	-114.	0	63		
26218 GTSQAD	DISTILL	15.	1.00	0.178	0.21	13.5	1.00	0.42	0.87	13.76	0.	0.	16.05	1.233	-7.	-37	0		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW	REQD										15%		BACK				
26218 GTSOAD DISTILL	15.	3.02	0.312	0.21	17.9	1.33	0.56	0.82	19.84	0.	-5.89	16.67	1.280	-11.	999	0			
26218 GTRA08 DISTILL	15.	1.00	0.164	0.21	15.5	1.15	0.49	0.92	14.00	0.	0.	16.56	1.272	-10.	-66	0			
26218 GTRA08 DISTILL	15.	5.06	0.338	0.21	32.2	2.38	1.01	1.22	27.18	0.	-11.82	19.98	1.535	-28.	0	58			
26218 GTRA12 DISTILL	15.	1.00	0.168	0.21	15.6	1.16	0.49	0.92	13.93	0.	0.	16.49	1.267	-10.	-66	0			
26218 GTRA12 DISTILL	15.	4.93	0.345	0.21	30.4	2.25	0.96	1.17	26.40	0.	-11.44	19.35	1.486	-25.	0	57			
26218 GTRA16 DISTILL	15.	1.00	0.170	0.21	16.1	1.19	0.51	0.93	13.90	0.	0.	16.53	1.270	-10.	-79	0			
26218 GTRA16 DISTILL	15.	4.59	0.341	0.21	30.6	2.26	0.96	1.17	25.22	0.	-10.45	19.17	1.472	-25.	0	57			
26218 GTR208 DISTILL	15.	1.00	0.169	0.21	14.9	1.10	0.47	0.90	13.91	0.	0.	16.38	1.258	-9.	-53	0			
26218 GTR208 DISTILL	15.	3.79	0.321	0.21	23.8	1.77	0.75	0.99	22.73	0.	-8.13	18.10	1.390	-18.	0	56			
26218 GTR212 DISTILL	15.	1.00	0.169	0.21	15.2	1.13	0.48	0.91	13.92	0.	0.	16.44	1.262	-9.	-59	0			
26218 GTR212 DISTILL	15.	4.07	0.327	0.21	25.7	1.91	0.81	1.04	23.64	0.	-8.93	18.47	1.418	-20.	0	57			
26218 GTR216 DISTILL	15.	1.00	0.172	0.21	15.6	1.15	0.49	0.92	13.86	0.	0.	16.42	1.261	-9.	-64	0			
26218 GTR216 DISTILL	15.	4.17	0.336	0.21	27.5	2.04	0.87	1.09	23.74	0.	-9.23	18.49	1.420	-21.	0	57			
26218 GTRW08 DISTILL	15.	1.00	0.138	0.21	15.6	1.16	0.49	0.92	14.43	0.	0.	17.00	1.306	-11.	-75	0			
26218 GTRW08 DISTILL	15.	6.03	0.297	0.21	32.1	2.38	1.01	1.25	32.95	0.	-14.65	22.95	1.763	-38.	0	57			
26218 GTRW12 DISTILL	15.	1.00	0.148	0.21	15.6	1.15	0.49	0.92	14.26	0.	0.	16.83	1.293	-11.	-72	0			
26218 GTRW12 DISTILL	15.	6.12	0.320	0.21	32.3	2.40	1.02	1.25	32.24	0.	-14.90	22.01	1.690	-35.	0	57			
26218 GTRW16 DISTILL	15.	1.00	0.151	0.21	16.0	1.18	0.50	0.93	14.22	0.	0.	16.84	1.293	-11.	-81	0			
26218 GTRW16 DISTILL	15.	5.66	0.319	0.21	32.0	2.37	1.01	1.23	30.41	0.	-13.57	21.45	1.647	-33.	0	57			
26218 GTR308 DISTILL	15.	1.00	0.128	0.21	15.0	1.11	0.47	0.91	14.60	0.	0.	17.10	1.313	-11.	-65	0			
26218 GTR308 DISTILL	15.	4.61	0.257	0.21	26.4	1.95	0.83	1.08	28.49	0.	-10.50	21.86	1.679	-31.	0	56			
26218 GTR312 DISTILL	15.	1.00	0.154	0.21	15.1	1.12	0.47	0.91	14.17	0.	0.	16.67	1.280	-10.	-59	0			
26218 GTR312 DISTILL	15.	4.92	0.314	0.21	27.0	2.00	0.85	1.10	27.58	0.	-11.41	20.12	1.545	-26.	0	57			
26218 GTR316 DISTILL	15.	1.00	0.153	0.21	15.5	1.15	0.49	0.92	14.19	0.	0.	16.74	1.286	-10.	-68	0			
26218 GTR316 DISTILL	15.	4.84	0.311	0.21	27.9	2.07	0.88	1.12	27.39	0.	-11.18	20.27	1.557	-27.	0	57			
26218 FCPADS DISTILL	15.	1.00	0.117	0.21	17.6	1.30	0.55	2.26	14.79	0.	0.	18.90	1.452	-18.	999	0			
26218 FCPADS DISTILL	15.	10.66	0.279	0.21	93.0	6.89	2.93	17.50	53.76	0.	-28.10	52.97	4.069	-162.	0	59			
26218 FCMCDS DISTILL	15.	1.00	0.156	0.21	18.1	1.34	0.57	2.16	14.13	0.	0.	18.20	1.398	-16.	999	0			
26218 FCMCDS DISTILL	15.	8.43	0.360	0.21	80.0	5.93	2.52	13.12	39.23	0.	-21.62	39.17	3.008	-112.	0	60			
28001 ONOCGN COAL-FG	33.	0.	0.	0.10	60.1	4.56	1.94	3.18	23.95	10.96	0.	44.58	1.000	0.	0	0			
28001 STM141 RESIDUA	33.	1.00	0.132	0.10	38.4	2.91	1.24	1.92	45.40	0.	0.	51.47	1.154	-11.	-23	0			
28001 STM141 RESIDUA	33.	1.80	0.203	0.10	39.8	3.02	1.29	1.66	48.72	0.	-5.25	49.44	1.109	-5.	-19	0			
28001 STM141 COAL-FG	33.	1.00	0.132	0.10	77.7	5.90	2.51	4.40	26.36	0.	0.	39.17	0.879	8.	22	5			
28001 STM141 COAL-FG	33.	1.80	0.203	0.10	76.0	5.77	2.45	4.00	28.29	0.	-5.25	35.26	0.791	22.	35	3			
28001 STM141 COAL-AF	33.	1.00	0.132	0.10	62.9	4.77	2.03	4.17	26.36	0.	0.	37.33	0.837	21.	122	1			
28001 STM141 COAL-AF	33.	1.80	0.203	0.10	58.1	4.41	1.87	3.88	28.29	0.	-5.25	33.19	0.745	37.	999	0			
28001 STM088 RESIDUA	33.	1.00	0.132	0.10	36.8	2.79	1.19	1.84	45.40	0.	0.	51.22	1.149	-10.	-21	0			
28001 STM088 RESIDUA	33.	1.26	0.157	0.10	36.2	2.75	1.17	1.56	46.46	0.	-1.68	50.26	1.127	-6.	-19	0			
28001 STM088 COAL-FG	33.	1.00	0.132	0.10	76.3	5.82	2.47	4.27	26.36	0.	0.	38.92	0.873	10.	24	4			
28001 STM088 COAL-FG	33.	1.26	0.157	0.10	71.1	5.40	2.29	3.72	26.98	0.	-1.68	36.71	0.823	19.	41	3			
28001 STM088 COAL-AF	33.	1.00	0.132	0.10	58.9	4.47	1.90	4.12	26.36	0.	0.	36.85	0.827	25.	999	0			
28001 STM088 COAL-AF	33.	1.26	0.157	0.10	56.1	4.26	1.81	3.74	26.98	0.	-1.68	35.10	0.787	32.	999	0			
28001 PFBSTM COAL-PF	33.	1.00	0.128	0.10	78.2	5.93	2.52	5.20	26.46	0.	0.	40.11	0.900	5.	19	5			
28001 PFBSTM COAL-PF	33.	3.06	0.274	0.10	75.2	5.70	2.43	6.81	31.64	0.	-13.54	33.04	0.741	28.	43	3			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	R01	GROSS						
SYSTEM	FUEL	REQD	GEN/	HEAT COST	RATIO *10**6	INSNC	ELEC							WORTH	%	PAY			
		MW	REQD											15%		BACK			
28001 TISTMT RESIDUA	33.	1.00	0.129	0.10	92.1	6.99	2.97	3.26	45.52	0.	0.	58.73	1.317	-60.	0	58			
28001 TISTMT RESIDUA	33.	4.14	0.322	0.10	205.8	15.62	6.64	5.95	58.94	0.	-20.65	66.50	1.492	-138.	0	69			
28001 TISTMT COAL	33.	1.00	0.129	0.10	134.1	10.18	4.33	5.74	26.43	0.	0.	46.67	1.047	-42.	2	19			
28001 TISTMT COAL	33.	4.14	0.322	0.10	258.9	19.65	8.35	8.74	34.22	0.	-20.65	50.32	1.129	-113.	2	20			
28001 TIHRSG RESIDUA	33.	1.00	0.096	0.10	117.4	8.69	3.70	3.79	47.28	0.	0.	63.45	1.423	-85.	0	59			
28001 TIHRSG RESIDUA	33.	2.16	0.166	0.10	184.9	13.69	5.82	5.19	54.28	0.	-7.64	71.35	1.601	-141.	0	62			
28001 TIHRSG COAL	33.	1.00	0.096	0.10	166.7	12.65	5.38	6.52	27.45	0.	0.	52.00	1.166	-74.	0	999			
28001 TIHRSG COAL	33.	2.16	0.166	0.10	234.8	17.81	7.57	7.90	31.52	0.	-7.64	57.17	1.282	-123.	0	999			
28001 STIRL DISTILL	33.	1.00	0.094	0.10	55.1	4.08	1.74	2.28	58.10	0.	0.	66.19	1.485	-65.	158	0			
28001 STIRL DISTILL	33.	5.24	0.259	0.10	117.8	8.73	3.71	3.71	90.07	0.	-27.87	78.34	1.757	-132.	0	57			
28001 STIRL RESIDUA	33.	1.00	0.094	0.10	55.1	4.08	1.74	2.28	47.39	0.	0.	55.49	1.245	-31.	-86	0			
28001 STIRL RESIDUA	33.	5.24	0.259	0.10	118.0	8.74	3.71	3.71	73.48	0.	-27.87	61.77	1.386	-80.	0	59			
28001 STIRL COAL	33.	1.00	0.094	0.10	97.7	7.24	3.08	4.82	27.52	0.	0.	42.58	0.957	-11.	9	10			
28001 STIRL COAL	33.	5.24	0.259	0.10	210.4	15.58	6.62	7.92	42.66	0.	-27.87	44.92	1.008	-71.	5	14			
28001 HEGT85 COAL-AF	33.	1.00	0.030	0.10	111.6	8.47	3.60	5.13	29.45	0.	0.	46.65	1.046	-31.	1	24			
28001 HEGT85 COAL-AF	33.	26.93	0.125	0.10	833.7	63.27	26.90	31.64	172.16	0.	-170.51	123.45	2.769	-619.	0	120			
28001 HEGT60 COAL-AF	33.	1.00	0.039	0.10	108.5	8.23	3.50	5.08	29.16	0.	0.	45.98	1.031	-28.	2	20			
28001 HEGT60 COAL-AF	33.	8.64	0.131	0.10	272.1	20.64	8.78	11.55	70.04	0.	-51.55	59.45	1.334	-149.	0	999			
28001 HEGT00 COAL-AF	33.	1.00	0.048	0.10	104.3	7.92	3.37	5.05	28.91	0.	0.	45.24	1.015	-23.	3	16			
28001 HEGT00 COAL-AF	33.	3.57	0.111	0.10	149.4	11.33	4.82	6.75	41.68	0.	-16.93	47.65	1.069	-53.	2	22			
28001 FCMCCL COAL	33.	1.00	0.113	0.10	106.7	8.29	3.53	5.55	26.94	0.	0.	44.30	0.994	-23.	5	13			
28001 FCMCCL COAL	33.	6.37	0.336	0.10	183.4	14.26	6.06	11.53	43.00	0.	-35.31	39.54	0.887	-46.	8	10			
28001 FCSTCL COAL	33.	1.00	0.117	0.10	104.7	8.14	3.46	5.45	26.82	0.	0.	43.86	0.984	-21.	6	12			
28001 FCSTCL COAL	33.	9.28	0.394	0.10	217.9	16.94	7.20	13.72	50.56	0.	-54.42	34.00	0.763	-46.	9	9			
28001 IGGTST COAL	33.	1.00	0.092	0.10	99.6	7.74	3.29	4.65	27.58	0.	0.	43.27	0.971	-16.	7	11			
28001 IGGTST COAL	33.	6.38	0.274	0.10	178.8	13.90	5.91	6.63	47.11	0.	-35.38	37.17	0.834	-36.	9	9			
28001 GTSOAR RESIDUA	33.	1.00	0.094	0.10	48.8	3.62	1.54	2.04	47.35	0.	0.	54.54	1.223	-25.	-45	0			
28001 GTSOAR RESIDUA	33.	6.78	0.288	0.10	86.6	6.56	2.79	2.88	82.67	0.	-38.03	56.87	1.276	-51.	0	58			
28001 GTAC08 RESIDUA	33.	1.00	0.112	0.10	43.5	3.22	1.37	1.91	46.41	0.	0.	52.90	1.187	-18.	-30	0			
28001 GTAC08 RESIDUA	33.	5.20	0.310	0.10	64.0	4.74	2.02	2.22	68.13	0.	-27.65	49.45	1.109	-16.	0	55			
28001 GTAC12 RESIDUA	33.	1.00	0.111	0.10	47.6	3.53	1.50	2.00	46.50	0.	0.	53.53	1.201	-21.	-38	0			
28001 GTAC12 RESIDUA	33.	6.52	0.333	0.10	77.1	5.71	2.43	2.57	75.52	0.	-36.28	49.94	1.120	-24.	0	58			
28001 GTAC16 RESIDUA	33.	1.00	0.108	0.10	48.5	3.60	1.53	2.02	46.62	0.	0.	53.76	1.206	-23.	-41	0			
28001 GTAC16 RESIDUA	33.	7.41	0.341	0.10	88.3	6.54	2.78	2.86	81.06	0.	-42.14	51.10	1.146	-33.	0	60			
28001 GTWC16 RESIDUA	33.	1.00	0.099	0.10	48.3	3.58	1.52	2.02	47.12	0.	0.	54.24	1.217	-24.	-42	0			
28001 GTWC16 RESIDUA	33.	7.72	0.315	0.10	82.4	6.11	2.60	2.73	86.63	0.	-44.20	53.87	1.208	-39.	0	58			
28001 CC1626 RESIDUA	33.	1.00	0.097	0.10	48.3	3.66	1.56	2.12	47.21	0.	0.	54.55	1.224	-25.	-47	0			
28001 CC1626 RESIDUA	33.	11.72	0.348	0.10	108.3	8.22	3.49	3.66	111.24	0.	-70.51	56.10	1.258	-59.	0	61			
28001 CC1622 RESIDUA	33.	1.00	0.102	0.10	48.3	3.67	1.56	2.12	46.96	0.	0.	54.30	1.218	-25.	-48	0			
28001 CC1622 RESIDUA	33.	10.53	0.356	0.10	114.1	8.66	3.68	3.68	101.48	0.	-62.69	54.81	1.229	-58.	0	64			
28001 CC1222 RESIDUA	33.	1.00	0.103	0.10	47.6	3.61	1.54	2.11	46.91	0.	0.	54.17	1.215	-24.	-44	0			
28001 CC1222 RESIDUA	33.	10.47	0.359	0.10	106.4	8.08	3.43	3.57	100.60	0.	-62.28	53.39	1.198	-50.	0	64			
28001 CC0822 RESIDUA	33.	1.00	0.110	0.10	47.3	3.59	1.53	2.10	46.52	0.	0.	53.74	1.206	-22.	-41	0			
28001 CC0822 RESIDUA	33.	8.29	0.360	0.10	83.6	6.35	2.70	2.95	85.01	0.	-47.94	49.07	1.101	-25.	0	63			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100										
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																				
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS							
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC		ELEC				WORTH 15%	%	PAY BACK							
28001 STIG15 RESIDUA	33.	1.00	0.037	0.10	48.5	3.53	1.53	2.31	50.38	0.	0.	57.81	1.297	-35.	-55	0				
28001 STIG15 RESIDUA	33.	290.72	0.171	0.10	2270.3	168.16	71.49	142.09	2696.57	0.	*****1173.32	26.319	-4583.	0	58					
28001 STIG10 RESIDUA	33.	1.00	0.052	0.10	47.5	3.52	1.50	2.19	49.55	0.	0.	56.75	1.273	-31.	-49	0				
28001 STIG10 RESIDUA	33.	26.88	0.218	0.10	222.1	16.45	6.99	11.72	264.57	0.	-170.19	129.54	2.906	-342.	0	58				
28001 STIG1S RESIDUA	33.	1.00	0.060	0.10	47.0	3.48	1.48	2.20	49.17	0.	0.	56.33	1.264	-30.	-46	0				
28001 STIG1S RESIDUA	33.	15.77	0.228	0.10	136.2	10.09	4.29	7.50	166.30	0.	-97.14	51.03	2.042	-181.	0	57				
28001 DEADV3 RESIDUA	33.	1.00	0.073	0.10	60.7	4.50	1.91	2.33	48.47	0.	0.	57.26	1.284	-39.	999	0				
28001 DEADV3 RESIDUA	33.	17.95	0.286	0.10	352.1	26.08	11.09	9.33	171.02	0.	-111.48	106.54	2.390	-330.	0	62				
28001 DEHTPM RESIDUA	33.	1.00	0.109	0.10	62.2	4.61	1.96	2.49	46.60	0.	0.	55.66	1.248	-35.	0	55				
28001 DEHTPM RESIDUA	33.	7.57	0.345	0.10	185.2	13.71	5.83	5.55	81.82	0.	-43.21	63.71	1.429	-113.	0	68				
28001 DESOA3 DISTILL	33.	1.00	0.062	0.10	66.0	4.89	2.08	2.52	60.14	0.	0.	69.63	1.562	-80.	0	56				
28001 DESOA3 DISTILL	33.	20.94	0.248	0.10	516.0	38.22	16.25	14.00	251.32	0.	-131.13	188.65	4.232	-664.	0	59				
28001 DESOA3 RESIDUA	33.	1.00	0.062	0.10	66.0	4.89	2.08	2.52	49.06	0.	0.	58.55	1.313	-46.	0	56				
28001 DESOA3 RESIDUA	33.	20.94	0.248	0.10	516.0	38.22	16.25	14.00	205.02	0.	-131.13	142.36	3.193	-519.	0	62				
28001 GTSOAO DISTILL	33.	1.00	0.105	0.10	46.2	3.42	1.45	1.97	57.35	0.	0.	64.20	1.440	-54.	-67	0				
28001 GTSOAO DISTILL	33.	6.29	0.312	0.10	67.3	4.99	2.12	2.33	93.30	0.	-34.77	67.95	1.524	-76.	0	56				
28001 GTRA08 DISTILL	33.	1.00	0.097	0.10	49.8	3.69	1.57	2.05	57.89	0.	0.	65.20	1.463	-55.	-89	0				
28001 GTRA08 DISTILL	33.	10.53	0.338	0.10	126.2	9.35	3.97	3.87	127.80	0.	-62.67	82.32	1.846	-148.	0	57				
28001 GTRA12 DISTILL	33.	1.00	0.099	0.10	50.1	3.71	1.58	2.06	57.73	0.	0.	65.07	1.460	-59.	-90	0				
28001 GTRA12 DISTILL	33.	10.26	0.345	0.10	123.2	9.12	3.88	3.79	124.12	0.	-60.87	80.04	1.795	-140.	0	57				
28001 GTRA16 DISTILL	33.	1.00	0.100	0.10	51.0	3.77	1.60	2.08	57.67	0.	0.	65.13	1.461	-58.	-96	0				
28001 GTRA16 DISTILL	33.	9.55	0.341	0.10	123.7	9.16	3.90	3.79	118.58	0.	-56.24	79.19	1.776	-137.	0	57				
28001 GTR208 DISTILL	33.	1.00	0.100	0.10	48.7	3.61	1.53	2.03	57.69	0.	0.	64.86	1.455	-57.	-81	0				
28001 GTR208 DISTILL	33.	7.89	0.321	0.10	96.3	7.14	3.03	3.08	106.87	0.	-45.33	74.79	1.678	-111.	0	57				
28001 GTR212 DISTILL	33.	1.00	0.100	0.10	49.3	3.65	1.55	2.04	57.71	0.	0.	64.96	1.457	-58.	-94	0				
28001 GTR212 DISTILL	33.	8.47	0.327	0.10	104.0	7.70	3.27	3.28	111.14	0.	-49.10	76.30	1.712	-119.	0	57				
28001 GTR216 DISTILL	33.	1.00	0.102	0.10	50.1	3.71	1.58	2.06	57.59	0.	0.	64.93	1.456	-58.	-89	0				
28001 GTR216 DISTILL	33.	8.68	0.336	0.10	111.7	8.27	3.52	3.48	111.60	0.	-50.51	76.35	1.713	-123.	0	57				
28001 GTRW08 DISTILL	33.	1.00	0.081	0.10	49.7	3.68	1.56	2.05	58.87	0.	0.	66.16	1.484	-62.	-91	0				
28001 GTRW08 DISTILL	33.	12.55	0.297	0.10	127.2	9.42	4.00	3.95	154.93	0.	-75.97	96.33	2.161	-193.	0	57				
28001 GTRW12 DISTILL	33.	1.00	0.087	0.10	49.6	3.68	1.56	2.05	58.49	0.	0.	65.77	1.475	-61.	-89	0				
28001 GTRW12 DISTILL	33.	12.74	0.320	0.10	128.0	9.48	4.03	3.97	151.58	0.	-77.17	91.89	2.061	-179.	0	57				
28001 GTRW16 DISTILL	33.	1.00	0.089	0.10	50.2	3.72	1.58	2.06	58.40	0.	0.	65.76	1.475	-61.	-93	0				
28001 GTRW16 DISTILL	33.	11.78	0.319	0.10	126.6	9.38	3.99	3.91	142.96	0.	-70.89	89.35	2.004	-171.	0	57				
28001 GTR308 DISTILL	33.	1.00	0.075	0.10	48.8	3.61	1.54	2.04	59.25	0.	0.	66.44	1.490	-62.	-86	0				
28001 GTR308 DISTILL	33.	9.59	0.257	0.10	96.1	7.12	3.03	3.13	133.95	0.	-56.45	90.78	2.036	-161.	0	56				
28001 GTR312 DISTILL	33.	1.00	0.091	0.10	48.7	3.61	1.53	2.03	58.28	0.	0.	65.45	1.468	-59.	-83	0				
28001 GTR312 DISTILL	33.	10.24	0.314	0.10	100.8	7.46	3.17	3.24	129.65	0.	-60.73	82.80	1.857	-138.	0	56				
28001 GTR316 DISTILL	33.	1.00	0.090	0.10	49.4	3.66	1.56	2.04	58.32	0.	0.	65.57	1.471	-60.	-87	0				
28001 GTR316 DISTILL	33.	10.08	0.311	0.10	103.5	7.67	3.26	3.31	128.76	0.	-59.68	83.32	1.869	-141.	0	57				
28001 FCPADS DISTILL	33.	1.00	0.069	0.10	58.8	4.35	1.85	5.29	59.67	0.	0.	71.16	1.596	-82.	999	0				
28001 FCPADS DISTILL	33.	22.17	0.279	0.10	379.9	28.14	11.96	80.02	252.77	0.	-139.22	233.68	5.242	-752.	0	59				
28001 FCMCDS DISTILL	33.	1.00	0.092	0.10	59.8	4.43	1.88	5.06	58.19	0.	0.	69.57	1.560	-78.	999	0				
28001 FCMCDS DISTILL	33.	17.54	0.360	0.10	340.4	25.21	10.72	60.04	184.43	0.	-108.76	171.64	3.850	-536.	0	60				

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	HEAT COST	HEAT COST	INSNC			ELEC				WORTH	%	PAY				
		MW	REQD	RATIO *10**6									15%		BACK				
28002 ONOCGN	COAL-FG	77.	0.	0.	0.25	58.4	4.43	1.88	3.09	22.95	26.03	0.	58.38	1.000	0.	0	0	0	0
28002 STM141	RESIDUA	77.	0.73	0.181	0.25	38.7	2.93	1.25	1.63	46.68	7.14	0.	59.63	1.021	-9	0	0	0	0
28002 STM141	COAL-FG	77.	0.73	0.181	0.25	73.8	5.60	2.38	3.88	27.11	7.14	0.	46.11	0.790	31.	45	3	3	3
28002 STM141	COAL-AF	77.	0.73	0.181	0.25	56.6	4.29	1.82	3.76	27.11	7.14	0.	44.13	0.756	45.	999	0	0	0
28002 STM088	RESIDUA	77.	0.51	0.126	0.25	35.1	2.67	1.13	1.53	44.52	12.84	0.	62.69	1.074	-2.	-18	0	0	0
28002 STM088	COAL-FG	77.	0.51	0.126	0.25	69.0	5.24	2.23	3.61	25.85	12.84	0.	49.77	0.853	22.	45	3	3	3
28002 STM088	COAL-AF	77.	0.51	0.126	0.25	54.6	4.14	1.76	3.63	25.85	12.84	0.	48.23	0.826	34.	999	0	0	0
28002 PFBSTM	COAL-PF	77.	1.00	0.243	0.25	77.6	5.89	2.50	6.53	28.92	0.	0.	43.84	0.751	36.	43	3	3	3
28002 PFBSTM	COAL-PF	77.	1.23	0.274	0.25	73.0	5.54	2.36	6.58	30.32	0.	-3.66	41.14	0.705	47.	61	2	2	2
28002 TISTMT	RESIDUA	77.	1.00	0.245	0.25	146.6	11.13	4.73	4.70	49.67	0.	0.	70.22	1.203	-79.	0	73	73	73
28002 TISTMT	RESIDUA	77.	1.67	0.322	0.25	199.1	15.11	6.42	5.77	56.48	0.	-10.47	73.30	1.256	-114.	0	96	96	96
28002 TISTMT	COAL	77.	1.00	0.245	0.25	191.8	14.56	6.19	7.32	28.84	0.	0.	56.91	0.975	-59.	8	12	12	12
28002 TISTMT	COAL	77.	1.67	0.322	0.25	250.4	19.01	8.08	8.47	32.79	0.	-10.47	57.88	0.991	-91.	5	13	13	13
28002 TIHRSG	RESIDUA	77.	0.87	0.158	0.25	178.8	13.24	5.63	5.03	52.01	3.34	0.	79.25	1.357	-121.	0	65	65	65
28002 TIHRSG	COAL	77.	0.87	0.158	0.25	227.1	17.23	7.33	7.65	30.20	3.34	0.	65.74	1.126	-104.	0	26	26	26
28002 STIRL	DISTILL	77.	1.00	0.177	0.25	74.4	5.51	2.34	2.84	66.38	0.	0.	77.06	1.320	-65.	0	56	56	56
28002 STIRL	DISTILL	77.	2.11	0.259	0.25	113.0	8.37	3.56	3.57	86.30	0.	-17.39	84.42	1.446	-106.	0	58	58	58
28002 STIRL	RESIDUA	77.	1.00	0.177	0.25	74.5	5.52	2.35	2.85	54.13	0.	0.	64.84	1.111	-27.	0	58	58	58
28002 STIRL	RESIDUA	77.	2.11	0.259	0.25	113.2	8.38	3.56	3.58	70.40	0.	-17.39	68.54	1.174	-57.	0	63	63	63
28002 STIRL	COAL	77.	1.00	0.177	0.25	129.1	9.56	4.07	5.87	31.43	0.	0.	50.93	0.872	-9.	12	8	8	8
28002 STIRL	COAL	77.	2.11	0.259	0.25	201.7	14.94	6.35	7.62	40.88	0.	-17.39	52.41	0.898	-48.	8	10	10	10
28002 HEGT85	COAL-AF	77.	1.00	0.057	0.25	157.8	11.97	5.09	6.80	36.02	0.	0.	59.87	1.026	-52.	3	16	16	16
28002 HEGT85	COAL-AF	77.	10.86	0.125	0.25	808.8	61.38	26.09	30.59	164.96	0.	-154.06	128.96	2.209	-582.	0	192	192	192
28002 HEGT60	COAL-AF	77.	1.00	0.075	0.25	149.9	11.38	4.84	6.63	35.33	0.	0.	58.17	0.996	-43.	5	13	13	13
28002 HEGT60	COAL-AF	77.	3.57	0.131	0.25	263.9	20.03	8.52	11.17	67.11	0.	-40.08	66.74	1.143	-125.	1	24	24	24
28002 HEGT00	COAL-AF	77.	1.00	0.090	0.25	130.9	9.93	4.22	6.22	34.73	0.	0.	55.10	0.944	-25.	8	10	10	10
28002 HEGT00	COAL-AF	77.	1.44	0.111	0.25	144.9	11.00	4.68	6.53	39.93	0.	-6.90	55.23	0.946	-32.	7	10	10	10
28002 FCMCCL	COAL	77.	1.00	0.213	0.25	134.2	10.43	4.43	7.40	30.05	0.	0.	52.32	0.896	-19.	10	9	9	9
28002 FCMCCL	COAL	77.	2.57	0.336	0.25	177.5	13.82	5.88	11.12	41.20	0.	-24.52	47.50	0.814	-26.	11	8	8	8
28002 FCSTCL	COAL	77.	1.00	0.220	0.25	131.8	10.25	4.36	7.14	29.76	0.	0.	51.50	0.882	-15.	11	8	8	8
28002 FCSTCL	COAL	77.	3.74	0.394	0.25	211.2	16.42	6.98	13.23	48.45	0.	-42.83	42.25	0.724	-26.	12	8	8	8
28002 IGGTST	COAL	77.	1.00	0.173	0.25	125.3	9.74	4.14	5.19	31.57	0.	0.	50.65	0.867	-9.	12	8	8	8
28002 IGGTST	COAL	77.	2.57	0.274	0.25	169.7	13.19	5.61	5.39	45.14	0.	-24.59	44.75	0.766	-13.	13	7	7	7
28002 GTSQAR	RESIDUA	77.	1.00	0.178	0.25	56.5	4.19	1.78	2.30	54.02	0.	0.	62.29	1.067	-11.	-62	0	0	0
28002 GTSQAR	RESIDUA	77.	2.74	0.288	0.25	85.9	6.36	2.70	2.80	79.21	0.	-27.12	63.96	1.095	-30.	0	61	61	61
28002 GTAC08	RESIDUA	77.	1.00	0.212	0.25	49.5	3.67	1.56	2.11	51.79	0.	0.	59.13	1.013	3.	-10	0	0	0
28002 GTAC08	RESIDUA	77.	2.10	0.310	0.25	62.0	4.59	1.95	2.16	65.28	0.	-17.17	56.81	0.973	4.	44	3	3	3
28002 GTAC12	RESIDUA	77.	1.00	0.209	0.25	52.8	3.91	1.66	2.20	52.01	0.	0.	59.78	1.024	-1.	-17	0	0	0
28002 GTAC12	RESIDUA	77.	2.63	0.333	0.25	74.6	5.52	2.35	2.49	72.36	0.	-25.45	57.28	0.981	-3.	10	8	8	8
28002 GTAC16	RESIDUA	77.	1.00	0.205	0.25	54.9	4.06	1.73	2.25	52.28	0.	0.	60.33	1.033	-4.	-26	0	0	0
28002 GTAC16	RESIDUA	77.	2.99	0.341	0.25	85.4	6.32	2.69	2.78	77.67	0.	-31.06	58.40	1.000	-12.	5	13	13	13
28002 GTWC16	RESIDUA	77.	1.00	0.187	0.25	53.0	3.93	1.67	2.21	53.48	0.	0.	61.29	1.050	-6.	-28	0	0	0
28002 GTWC16	RESIDUA	77.	3.11	0.315	0.25	79.9	5.92	2.52	2.66	83.01	0.	-33.03	61.07	1.046	-18.	0	68	68	68
28002 CC1626	RESIDUA	77.	1.00	0.183	0.25	54.0	4.10	1.74	2.37	53.70	0.	0.	61.91	1.060	-9.	-44	0	0	0

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC					WORTH	%	PAY			
		MW												15%		BACK			
28002 CC1626	RESIDUA	77.	4.73	0.348	0.25	102.7	7.79	3.31	3.50	106.58	0.	-58.24	62.94	1.078	-35.	0	98		
28002 CC1622	RESIDUA	77.	1.00	0.192	0.25	55.3	4.20	1.78	2.38	53.10	0.	0.	61.46	1.053	-8.	-52	0		
28002 CC1622	RESIDUA	77.	4.25	0.356	0.25	110.3	8.37	3.56	3.58	97.24	0.	-50.75	61.99	1.062	-36.	0	999		
28002 CC1222	RESIDUA	77.	1.00	0.194	0.25	53.8	4.09	1.74	2.36	52.98	0.	0.	61.16	1.048	-6.	-36	0		
28002 CC1222	RESIDUA	77.	4.22	0.359	0.25	99.2	7.53	3.20	3.38	96.39	0.	-50.37	60.14	1.030	-25.	0	26		
28002 CC0822	RESIDUA	77.	1.00	0.208	0.25	52.3	3.97	1.69	2.32	52.06	0.	0.	60.04	1.028	-2.	-20	0		
28002 CC0822	RESIDUA	77.	3.34	0.360	0.25	81.0	6.15	2.61	2.87	81.46	0.	-36.61	56.48	0.967	-5.	11	3		
28002 STIG15	RESIDUA	77.	1.00	0.069	0.25	59.0	4.37	1.86	3.07	61.21	0.	0.	70.51	1.208	-38.	999	3		
28002 STIG15	RESIDUA	77.	117.27	0.171	0.25	2177.7	161.30	68.58	136.27	2583.80	0.	*****1133.93	19.423	-4373.	0	56			
28002 STIG10	RESIDUA	77.	1.00	0.099	0.25	56.8	4.21	1.79	2.79	59.25	0.	0.	68.03	1.165	-29.	151	0		
28002 STIG10	RESIDUA	77.	10.84	0.218	0.25	214.0	15.85	6.74	11.29	253.50	0.	-153.76	133.62	2.289	-309.	0	58		
28002 STIG1S	RESIDUA	77.	1.00	0.113	0.25	52.4	3.88	1.65	2.71	58.35	0.	0.	66.58	1.140	-22.	-59	0		
28002 STIG1S	RESIDUA	77.	6.36	0.228	0.25	137.7	10.20	4.34	7.39	159.34	0.	-83.76	97.51	1.670	-159.	0	58		
28002 DEADV3	RESIDUA	77.	1.00	0.138	0.25	86.3	6.39	2.72	3.14	56.69	0.	0.	68.93	1.181	-45.	0	58		
28002 DEADV3	RESIDUA	77.	7.24	0.286	0.25	337.6	25.01	10.63	9.46	163.87	0.	-97.49	111.46	1.909	-296.	0	64		
28002 DEHTPM	RESIDUA	77.	1.00	0.205	0.25	86.4	6.40	2.72	3.21	52.25	0.	0.	64.58	1.106	-32.	0	61		
28002 DEHTPM	RESIDUA	77.	3.05	0.345	0.25	177.5	13.15	5.59	5.35	78.40	0.	-32.08	70.40	1.206	-93.	0	100		
28002 DESOA3	DISTILL	77.	1.00	0.116	0.25	98.9	7.32	3.11	3.46	71.21	0.	0.	85.10	1.458	-102.	0	57		
28002 DESOA3	DISTILL	77.	8.45	0.248	0.25	494.7	36.64	15.58	13.45	240.81	0.	-116.33	190.15	3.257	-616.	0	60		
28002 DESOA3	RESIDUA	77.	1.00	0.116	0.25	98.9	7.32	3.11	3.46	58.09	0.	0.	71.99	1.233	-61.	0	59		
28002 DESOA3	RESIDUA	77.	8.45	0.248	0.25	494.7	36.64	15.58	13.45	196.45	0.	-116.33	145.79	2.497	-477.	0	63		
28002 GTSOAO	DISTILL	77.	1.00	0.199	0.25	49.5	3.67	1.56	2.12	64.58	0.	0.	71.93	1.232	-38.	-69	0		
28002 GTSOAO	DISTILL	77.	2.54	0.312	0.25	65.2	4.83	2.05	2.26	89.39	0.	-24.00	74.53	1.277	-53.	0	56		
28002 GTRA08	DISTILL	77.	1.00	0.183	0.25	58.8	4.35	1.85	2.35	65.86	0.	0.	74.42	1.275	-50.	999	0		
28002 GTRA08	DISTILL	77.	4.25	0.338	0.25	122.3	9.06	3.85	3.77	122.45	0.	-50.74	88.39	1.514	-123.	0	58		
28002 GTRA12	DISTILL	77.	1.00	0.188	0.25	57.5	4.26	1.81	2.32	65.48	0.	0.	73.87	1.265	-47.	999	0		
28002 GTRA12	DISTILL	77.	4.14	0.345	0.25	119.3	8.83	3.76	3.68	118.93	0.	-49.01	86.19	1.476	-115.	0	58		
28002 GTRA16	DISTILL	77.	1.00	0.189	0.25	59.0	4.37	1.86	2.36	65.35	0.	0.	73.94	1.267	-48.	999	0		
28002 GTRA16	DISTILL	77.	3.85	0.341	0.25	119.8	8.87	3.77	3.68	113.63	0.	-44.57	85.38	1.462	-113.	0	58		
28002 GTR208	DISTILL	77.	1.00	0.189	0.25	54.5	4.04	1.72	2.25	65.38	0.	0.	73.38	1.257	-44.	134	0		
28002 GTR208	DISTILL	77.	3.18	0.321	0.25	88.8	6.58	2.80	2.88	102.40	0.	-34.12	80.54	1.379	-83.	0	57		
28002 GTR212	DISTILL	77.	1.00	0.188	0.25	55.7	4.12	1.75	2.28	65.44	0.	0.	73.59	1.261	-46.	171	0		
28002 GTR212	DISTILL	77.	3.42	0.327	0.25	100.7	7.46	3.17	3.19	106.50	0.	-37.72	82.59	1.415	-95.	0	57		
28002 GTR216	DISTILL	77.	1.00	0.192	0.25	57.4	4.25	1.81	2.32	65.14	0.	0.	73.52	1.259	-46.	999	0		
28002 GTR216	DISTILL	77.	3.50	0.336	0.25	108.1	8.01	3.40	3.38	106.93	0.	-39.08	82.64	1.415	-98.	0	58		
28002 GTRW08	DISTILL	77.	1.00	0.154	0.25	55.7	4.12	1.75	2.29	68.19	0.	0.	76.35	1.308	-54.	199	0		
28002 GTRW08	DISTILL	77.	5.06	0.297	0.25	123.3	9.13	3.88	3.84	148.45	0.	-63.47	101.84	1.744	-166.	0	57		
28002 GTRW12	DISTILL	77.	1.00	0.165	0.25	55.6	4.12	1.75	2.28	67.28	0.	0.	75.43	1.292	-51.	188	0		
28002 GTRW12	DISTILL	77.	5.14	0.320	0.25	124.2	9.20	3.91	3.86	145.24	0.	-64.63	97.58	1.671	-153.	0	57		
28002 GTRW16	DISTILL	77.	1.00	0.168	0.25	56.6	4.19	1.78	2.30	67.07	0.	0.	75.25	1.291	-52.	999	0		
28002 GTRW16	DISTILL	77.	4.75	0.319	0.25	122.8	9.10	3.87	3.81	136.98	0.	-58.61	95.14	1.630	-145.	0	57		
28002 GTR308	DISTILL	77.	1.00	0.143	0.25	54.3	4.02	1.71	2.26	69.11	0.	0.	77.09	1.320	-56.	158	0		
28002 GTR308	DISTILL	77.	3.87	0.257	0.25	93.1	6.90	2.93	3.05	128.35	0.	-44.77	96.48	1.652	-135.	0	56		
28002 GTR312	DISTILL	77.	1.00	0.171	0.25	54.0	4.00	1.70	2.24	66.80	0.	0.	74.73	1.280	-48.	134	0		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC							WORTH	%	PAY	BACK
		MW														15%			
28002 GTR312 DISTILL	77.	4.13	0.314	0.25	97.7	7.24	3.08	3.15	124.23	0.	-48.87	88.83	1.521	-113.	0	57			
28002 GTR316 DISTILL	77.	1.00	0.170	0.25	55.1	4.08	1.74	2.27	66.88	0.	0.	74.96	1.284	-50.	165	0			
28002 GTR316 DISTILL	77.	4.06	0.311	0.25	100.4	7.44	3.16	3.22	123.37	0.	-47.86	89.33	1.530	-116.	0	57			
28002 FCPADS DISTILL	77.	1.00	0.130	0.25	81.2	6.02	2.56	10.23	70.10	0.	0.	88.91	1.523	-107.	0	57			
28002 FCPADS DISTILL	77.	8.94	0.279	0.25	364.3	26.98	11.47	76.70	242.20	0.	-124.08	233.27	3.996	-700.	0	59			
28002 FCMCDS DISTILL	77.	1.00	0.174	0.25	84.3	6.24	2.65	9.71	66.57	0.	0.	85.18	1.459	-96.	0	57			
28002 FCMCDS DISTILL	77.	7.08	0.360	0.25	326.4	24.18	10.28	57.55	176.71	0.	-94.89	173.83	2.977	-494.	0	60			
28003 ONCCGN COAL-FG	97.	0.	0.	0.35	54.4	4.13	1.76	2.88	20.62	32.77	0.	62.16	1.000	0.	0	0			
28003 STM141 RESIDUA	97.	0.52	0.156	0.35	35.9	2.72	1.16	1.54	41.94	15.80	0.	63.16	1.016	6.	-9	0			
28003 STM141 COAL-FG	97.	0.52	0.156	0.35	68.5	5.20	2.21	3.61	24.35	15.80	0.	51.18	0.823	28.	44	3			
28003 STM141 COAL-AF	97.	0.52	0.156	0.35	53.0	4.02	1.71	3.49	24.35	15.80	0.	49.38	0.794	41.	999	0			
28003 STM088 RESIDUA	97.	0.36	0.109	0.35	32.6	2.47	1.05	1.44	40.00	20.93	0.	65.89	1.060	-1.	-15	0			
28003 STM088 COAL-FG	97.	0.36	0.109	0.35	64.0	4.86	2.07	3.37	23.23	20.93	0.	54.44	0.876	20.	45	3			
28003 STM088 COAL-AF	97.	0.36	0.109	0.35	51.1	3.88	1.65	3.37	23.23	20.93	0.	53.05	0.854	30.	999	0			
28003 PFBSTM COAL-PF	97.	0.88	0.258	0.35	68.0	5.16	2.19	6.03	27.24	3.91	0.	44.53	0.716	48.	66	2			
28003 TISTMT RESIDUA	97.	1.00	0.295	0.35	163.8	12.43	5.29	5.08	48.29	0.	0.	71.09	1.144	-80.	0	999			
28003 TISTMT RESIDUA	97.	1.19	0.322	0.35	183.1	13.89	5.91	5.34	50.74	0.	-3.77	72.11	1.160	-93.	0	999			
28003 TISTMT COAL	97.	1.00	0.295	0.35	212.9	16.16	6.87	7.72	28.04	0.	0.	58.78	0.946	-66.	6	11			
28003 TISTMT COAL	97.	1.19	0.322	0.35	230.5	17.49	7.44	7.82	29.46	0.	-3.77	58.43	0.940	-73.	6	11			
28003 TIHRSG RESIDUA	97.	0.62	0.136	0.35	164.4	12.17	5.18	4.65	46.73	12.38	0.	81.12	1.305	-110.	0	65			
28003 TIHRSG COAL	97.	0.62	0.136	0.35	208.9	15.85	6.74	7.05	27.14	12.38	0.	69.16	1.113	-96.	0	27			
28003 STIRL DISTILL	97.	1.00	0.213	0.35	82.2	6.09	2.59	3.02	66.08	0.	0.	77.78	1.251	-61.	0	57			
28003 STIRL DISTILL	97.	1.51	0.259	0.35	101.9	7.55	3.21	3.27	77.54	0.	-9.99	81.57	1.312	-82.	0	58			
28003 STIRL RESIDUA	97.	1.00	0.213	0.35	82.3	6.10	2.59	3.02	53.91	0.	0.	65.62	1.056	-23.	0	72			
28003 STIRL RESIDUA	97.	1.51	0.259	0.35	102.0	7.56	3.21	3.27	63.26	0.	-9.99	67.31	1.083	-38.	0	53			
28003 STIRL COAL	97.	1.00	0.213	0.35	143.5	10.63	4.52	6.19	31.30	0.	0.	52.64	0.847	-11.	12	8			
28003 STIRL COAL	97.	1.51	0.259	0.35	180.6	13.38	5.69	6.91	36.73	0.	-9.99	52.71	0.848	-29.	10	9			
28003 HEGT85 COAL-AF	97.	1.00	0.068	0.35	172.4	13.08	5.56	7.28	37.07	0.	0.	63.00	1.014	-59.	4	14			
28003 HEGT85 COAL-AF	97.	7.75	0.125	0.35	749.6	56.88	24.18	28.13	148.21	0.	-132.79	124.62	2.005	-530.	0	397			
28003 HEGT60 COAL-AF	97.	1.00	0.090	0.35	154.2	11.70	4.98	6.95	35.21	0.	0.	59.74	0.961	-40.	7	11			
28003 HEGT60 COAL-AF	97.	2.54	0.131	0.35	244.7	18.57	7.89	10.27	60.29	0.	-30.38	66.65	1.072	-106.	3	18			
28003 HEGT00 COAL-AF	97.	1.00	0.109	0.35	135.4	10.28	4.37	6.25	35.45	0.	0.	56.34	0.907	-21.	10	9			
28003 HEGT00 COAL-AF	97.	1.03	0.111	0.35	134.3	10.19	4.33	6.01	35.88	0.	-0.57	55.85	0.898	-19.	10	9			
28003 FCMCCL COAL	97.	1.00	0.257	0.35	133.0	10.34	4.40	7.76	29.56	0.	0.	52.06	0.838	-8.	13	7			
28003 FCMCCL COAL	97.	1.83	0.336	0.35	164.3	12.77	5.43	10.16	37.02	0.	-16.40	48.98	0.788	-14.	12	7			
28003 FCSTCL COAL	97.	1.00	0.266	0.35	137.6	10.70	4.55	7.61	29.20	0.	0.	52.06	0.838	-10.	12	7			
28003 FCSTCL COAL	97.	2.67	0.394	0.35	195.1	15.17	6.45	12.09	43.53	0.	-32.85	44.39	0.714	-15.	13	7			
28003 IGGTST COAL	97.	1.00	0.209	0.35	123.0	9.56	4.07	4.95	31.47	0.	0.	50.05	0.805	4.	15	6			
28003 IGGTST COAL	97.	1.84	0.274	0.35	155.7	12.11	5.15	5.00	40.56	0.	-16.46	46.36	0.746	-1.	14	7			
28003 GTSOAR RESIDUA	97.	1.00	0.215	0.35	55.1	4.08	1.74	2.26	53.77	0.	0.	61.84	0.995	1.	999	0			
28003 GTSOAR RESIDUA	97.	1.95	0.288	0.35	73.1	5.41	2.30	2.45	71.17	0.	-18.74	62.60	1.007	-9.	2	18			
28003 GTAC08 RESIDUA	97.	1.00	0.257	0.35	50.3	3.73	1.58	2.11	50.95	0.	0.	58.37	0.939	15.	999	0			
28003 GTAC08 RESIDUA	97.	1.50	0.310	0.35	57.3	4.24	1.80	2.02	58.65	0.	-9.80	56.91	0.916	16.	167	1			
28003 GTAC12 RESIDUA	97.	1.00	0.252	0.35	53.5	3.96	1.68	2.20	51.23	0.	0.	59.08	0.951	11.	999	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/	/HEAT COST															
		MW	REQD	RATIO *10**6	INSNC										WORTH	%	PAY	BACK	
															15%				
28003 GTAC12	RESIDUA	97.	1.88	0.333	0.35	68.6	5.08	2.16	2.32	65.02	0.	-17.23	57.35	0.923	9.	26	4		
28003 GTAC16	RESIDUA	97.	1.00	0.247	0.35	53.6	3.97	1.69	2.21	51.58	0.	0.	59.45	0.957	10.	999	0		
28003 GTAC16	RESIDUA	97.	2.13	0.341	0.85	78.5	5.81	2.47	2.58	69.79	0.	-22.28	59.38	0.939	1.	16	6		
28003 GTWC16	RESIDUA	97.	1.00	0.225	0.35	51.0	3.77	1.60	2.16	53.08	0.	0.	60.62	0.975	7.	999	0		
28003 GTWC16	RESIDUA	97.	2.22	0.315	0.35	74.0	5.48	2.33	2.49	74.58	0.	-24.05	60.83	0.979	-4.	10	9		
28003 CC1626	RESIDUA	97.	1.00	0.221	0.35	55.7	4.23	1.80	2.42	53.36	0.	0.	61.81	0.994	1.	22	5		
28003 CC1626	RESIDUA	97.	3.37	0.348	0.35	95.0	7.21	3.06	3.27	95.76	0.	-46.70	62.61	1.007	-21.	4	15		
28003 CC1622	RESIDUA	97.	1.00	0.232	0.35	57.6	4.37	1.86	2.44	52.61	0.	0.	61.28	0.986	1.	21	5		
28003 CC1622	RESIDUA	97.	3.03	0.356	0.35	97.5	7.40	3.15	3.23	87.37	0.	-39.97	61.18	0.984	-17.	7	11		
28003 CC1222	RESIDUA	97.	1.00	0.235	0.35	55.8	4.24	1.80	2.42	52.45	0.	0.	60.91	0.980	3.	51	2		
28003 CC1222	RESIDUA	97.	3.01	0.359	0.35	91.3	6.93	2.95	3.15	86.60	0.	-39.62	60.00	0.965	-11.	9	9		
28003 CC0822	RESIDUA	97.	1.00	0.252	0.35	50.5	3.83	1.63	2.28	51.29	0.	0.	59.03	0.950	12.	999	0		
28003 CC0822	RESIDUA	97.	2.39	0.360	0.35	71.9	5.46	2.32	2.61	73.19	0.	-27.27	56.32	0.906	10.	24	4		
28003 STIG15	RESIDUA	97.	1.00	0.083	0.35	61.5	4.55	1.94	3.32	62.82	0.	0.	72.63	1.169	-36.	0	56		
28003 STIG15	RESIDUA	97.	83.69	0.171	0.35	1960.1	145.18	61.73	122.67	2321.50	0.	*****1025.05	16.492	-3919.	0	58			
28003 STIG10	RESIDUA	97.	1.00	0.119	0.35	55.5	4.11	1.75	2.89	60.35	0.	0.	69.10	1.112	-22.	999	0		
28003 STIG10	RESIDUA	97.	7.74	0.218	0.35	193.4	14.32	6.09	10.23	227.77	0.	-132.52	125.90	2.026	-265.	0	58		
28003 STIG1S	RESIDUA	97.	1.00	0.136	0.35	54.1	4.01	1.71	2.89	59.22	0.	0.	67.82	1.091	-17.	166	0		
28003 STIG1S	RESIDUA	97.	4.54	0.228	0.35	124.6	9.23	3.92	6.71	143.17	0.	-69.62	93.40	1.503	-130.	0	58		
28003 DEADV3	RESIDUA	97.	1.00	0.166	0.35	92.4	6.85	2.91	3.31	57.12	0.	0.	70.19	1.129	-42.	0	62		
28003 DEADV3	RESIDUA	97.	5.17	0.286	0.35	315.2	23.34	9.92	8.86	147.23	0.	-81.97	107.39	1.728	-263.	0	65		
28003 DEHTPM	RESIDUA	97.	1.00	0.248	0.35	93.4	6.92	2.94	3.40	51.53	0.	0.	64.79	1.042	-26.	0	999		
28003 DEHTPM	RESIDUA	97.	2.18	0.345	0.35	160.0	11.85	5.04	4.87	70.44	0.	-23.19	69.01	1.110	-70.	0	999		
28003 DESO3	DISTILL	97.	1.00	0.141	0.35	108.3	8.02	3.41	3.71	72.19	0.	0.	87.34	1.405	-103.	0	58		
28003 DESO3	DISTILL	97.	6.03	0.248	0.35	445.1	32.96	14.02	12.17	216.36	0.	-98.89	176.62	2.842	-541.	0	60		
28003 DESO3	RESIDUA	97.	1.00	0.141	0.35	108.3	8.02	3.41	3.71	58.89	0.	0.	74.04	1.191	-62.	0	62		
28003 DESO3	RESIDUA	97.	6.03	0.248	0.35	445.1	32.96	14.02	12.17	176.51	0.	-98.89	136.77	2.200	-416.	0	64		
28003 GTSO3	DISTILL	97.	1.00	0.240	0.35	49.5	3.66	1.56	2.11	63.85	0.	0.	71.13	1.145	-25.	-74	0		
28003 GTSO3	DISTILL	97.	1.81	0.312	0.35	60.1	4.45	1.89	2.11	80.32	0.	-15.93	72.84	1.172	-35.	0	56		
28003 GTRA08	DISTILL	97.	1.00	0.221	0.35	61.2	4.53	1.93	2.42	65.46	0.	0.	74.33	1.196	-41.	0	56		
28003 GTRA08	DISTILL	97.	3.03	0.338	0.35	111.0	8.22	3.49	3.46	110.02	0.	-39.95	85.24	1.371	-98.	0	58		
28003 GTRA12	DISTILL	97.	1.00	0.227	0.35	59.9	4.44	1.89	2.38	64.97	0.	0.	73.68	1.185	-38.	0	56		
28003 GTRA12	DISTILL	97.	2.95	0.345	0.35	107.7	7.97	3.39	3.37	106.86	0.	-38.40	83.19	1.338	-90.	0	58		
28003 GTRA16	DISTILL	97.	1.00	0.228	0.35	63.8	4.72	2.01	2.48	64.82	0.	0.	74.03	1.191	-41.	0	56		
28003 GTRA16	DISTILL	97.	2.75	0.341	0.35	108.2	8.01	3.41	3.37	102.09	0.	-34.42	82.46	1.327	-88.	0	58		
28003 GTR208	DISTILL	97.	1.00	0.228	0.35	55.4	4.10	1.74	2.26	64.86	0.	0.	72.97	1.174	-34.	999	0		
28003 GTR208	DISTILL	97.	2.27	0.321	0.35	79.6	5.90	2.51	2.63	92.00	0.	-25.02	78.02	1.255	-61.	0	57		
28003 GTR212	DISTILL	97.	1.00	0.227	0.35	56.7	4.20	1.78	2.30	64.92	0.	0.	73.21	1.178	-35.	0	55		
28003 GTR212	DISTILL	97.	2.44	0.327	0.35	85.8	6.36	2.70	2.79	95.68	0.	-28.26	79.27	1.275	-68.	0	57		
28003 GTR216	DISTILL	97.	1.00	0.232	0.35	58.8	4.36	1.85	2.35	64.55	0.	0.	72.11	1.176	-36.	0	56		
28003 GTR216	DISTILL	97.	2.50	0.336	0.35	92.3	6.84	2.91	2.96	96.08	0.	-29.48	79.30	1.276	-71.	0	58		
28003 GTRW08	DISTILL	97.	1.00	0.186	0.35	57.5	4.26	1.8	2.34	68.39	0.	0.	76.79	1.236	-47.	0	56		
28003 GTRW08	DISTILL	97.	3.61	0.297	0.35	111.9	8.29	3.	3.53	133.38	0.	-51.39	97.33	1.566	-136.	0	57		
28003 GTRW12	DISTILL	97.	1.00	0.200	0.35	57.4	4.25	1.81	2.33	67.24	0.	0.	75.64	1.217	-43.	0	56		

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	RECD	GEN/	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW	REQD										15X		BACK				
28003 GTRW12	DISTILL	97.	3.67	0.320	0.35	112.7	8.35	3.55	3.54	130.49	0.	-52.43	93.50	1.504	-125.	0	57		
28003 GTRW16	DISTILL	97.	1.00	0.203	0.35	58.5	4.33	1.84	2.36	66.98	0.	0.	75.51	1.215	-43.	0	56		
28003 GTRW16	DISTILL	97.	3.39	0.319	0.35	103.3	7.65	3.25	3.29	123.07	0.	-47.03	90.25	1.452	-110.	0	57		
28003 GTR308	DISTILL	97.	1.00	0.172	0.35	55.7	4.13	1.75	2.30	69.54	0.	0.	77.72	1.250	-49.	999	0		
28003 GTR308	DISTILL	97.	2.76	0.257	0.35	86.1	6.38	2.71	2.85	115.32	0.	-34.60	92.66	1.491	-110.	0	56		
28003 GTR312	DISTILL	97.	1.00	0.207	0.35	55.4	4.10	1.74	2.28	66.63	0.	0.	74.76	1.203	-39.	999	0		
28003 GTR312	DISTILL	97.	2.95	0.314	0.35	88.2	6.53	2.79	2.89	111.62	0.	-38.28	85.54	1.376	-88.	0	57		
28003 GTR316	DISTILL	97.	1.00	0.206	0.35	56.7	4.20	1.79	2.31	66.73	0.	0.	75.03	1.207	-41.	0	55		
28003 GTR316	DISTILL	97.	2.90	0.311	0.35	90.7	6.72	2.86	2.95	110.85	0.	-37.37	86.00	1.384	-91.	0	57		
28003 FCPADS	DISTILL	97.	1.00	0.157	0.35	86.0	6.37	2.71	12.29	70.80	0.	0.	92.17	1.483	-110.	0	58		
28003 FCPADS	DISTILL	97.	6.38	0.279	0.35	327.9	24.29	10.33	68.95	217.61	0.	-105.85	215.33	3.464	-616.	0	59		
28003 FCMCDS	DISTILL	97.	1.00	0.210	0.35	89.5	6.63	2.82	11.63	66.35	0.	0.	87.42	1.407	-96.	0	58		
28003 FCMCDS	DISTILL	97.	5.05	0.360	0.35	299.7	22.20	9.44	51.89	158.77	0.	-79.63	162.68	2.617	-436.	0	60		
28121 OHOCGH	COAL-FG	120.	0.	0.	1.55	78.9	1.44	0.61	1.20	5.60	39.26	0.	48.10	1.000	0.	0	0		
28121 STM141	RESIDUA	120.	0.15	0.076	1.55	12.5	0.95	0.40	0.75	11.91	33.28	0.	47.29	0.983	6.	999	0		
28121 STM141	COAL-FG	120.	0.15	0.076	1.55	25.3	1.92	0.82	1.56	6.92	33.28	0.	44.49	0.925	8.	35	3		
28121 STM141	COAL-AF	120.	0.15	0.076	1.55	18.5	1.40	0.60	1.40	6.92	33.28	0.	43.60	0.906	14.	999	0		
28121 STM088	RESIDUA	120.	0.11	0.057	1.55	11.2	0.85	0.36	0.72	11.35	34.77	0.	48.05	0.999	4.	-4	0		
28121 STM088	COAL-FG	120.	0.11	0.057	1.55	23.4	1.78	0.76	1.47	6.59	34.77	0.	45.36	0.943	6.	36	3		
28121 STM088	COAL-AF	120.	0.11	0.057	1.55	17.5	1.33	0.57	1.35	6.59	34.77	0.	44.60	0.927	12.	999	0		
28121 PFBSTM	COAL-PF	120.	0.24	0.117	1.55	30.4	2.31	0.98	2.32	7.70	29.96	0.	43.27	0.900	9.	27	4		
28121 TISTMT	RESIDUA	120.	0.31	0.154	1.55	72.8	5.52	2.35	2.31	14.41	27.00	0.	51.59	1.073	-37.	0	999		
28121 TISTMT	COAL	120.	0.31	0.154	1.55	92.2	7.00	2.97	3.30	8.37	27.00	0.	48.63	1.011	-37.	4	14		
28121 TIHRSG	RESIDUA	120.	0.14	0.053	1.55	61.9	4.59	1.95	1.89	12.51	33.80	0.	54.74	1.138	-41.	0	67		
28121 TIHRSG	COAL	120.	0.14	0.053	1.55	79.5	6.03	2.56	2.80	7.27	33.80	0.	52.46	1.091	-43.	0	999		
28121 STIRL	DISTILL	120.	0.36	0.128	1.55	30.3	2.24	0.95	1.21	21.35	25.31	0.	51.06	1.062	-14.	0	60		
28121 STIRL	RESIDUA	120.	0.36	0.128	1.55	30.3	2.25	0.95	1.22	17.41	25.31	0.	47.13	0.980	-2.	11	8		
28121 STIRL	COAL	120.	0.36	0.128	1.55	53.0	3.92	1.67	2.37	10.11	25.31	0.	43.38	0.902	-1.	14	7		
28121 HEGT65	COAL-AF	120.	1.00	0.153	1.55	154.6	11.73	4.99	6.08	24.20	0.	0.	47.00	0.977	-62.	5	13		
28121 HEGT85	COAL-AF	120.	1.30	0.160	1.55	178.6	13.55	5.76	6.74	29.83	0.	-7.13	48.76	1.014	-79.	4	14		
28121 HEGT60	COAL-AF	120.	0.53	0.095	1.55	93.7	7.11	3.02	3.66	15.06	18.44	0.	47.29	0.983	-33.	6	12		
28121 HEGT00	COAL-AF	120.	0.23	0.045	1.55	54.0	4.10	1.74	2.29	9.61	30.23	0.	47.97	0.997	-16.	5	13		
28121 FCMCCL	COAL	120.	0.42	0.178	1.55	64.8	5.04	2.14	3.54	10.04	22.96	0.	43.72	0.909	-9.	11	8		
28121 FGSTCL	COAL	120.	0.66	0.296	1.55	80.2	6.24	2.65	4.42	12.35	13.29	0.	38.95	0.810	-2.	14	7		
28121 IGGTST	COAL	120.	0.46	0.167	1.55	62.6	4.87	2.07	2.33	11.52	21.01	0.	41.80	0.869	-2.	14	7		
28121 GTSOAR	RESIDUA	120.	0.43	0.160	1.55	23.2	1.72	0.73	0.97	18.96	22.21	0.	44.59	0.927	9.	52	2		
28121 GTAC08	RESIDUA	120.	0.34	0.145	1.55	18.2	1.35	0.57	0.82	15.96	25.90	0.	44.60	0.927	12.	999	0		
28121 GTAC12	RESIDUA	120.	0.42	0.179	1.55	21.5	1.59	0.68	0.92	17.60	22.61	0.	43.40	0.902	14.	110	1		
28121 GTAC16	RESIDUA	120.	0.48	0.200	1.55	24.5	1.81	0.77	1.00	18.80	20.43	0.	42.82	0.890	14.	57	2		
28121 GTWC16	RESIDUA	120.	0.50	0.189	1.55	24.0	1.78	0.76	1.00	20.26	19.47	0.	43.27	0.900	13.	57	2		
28121 CC1626	RESIDUA	120.	0.83	0.310	1.55	33.1	2.51	1.07	1.42	27.19	6.70	0.	38.88	0.808	22.	38	3		
28121 CC1622	RESIDUA	120.	0.75	0.293	1.55	32.8	2.49	1.06	1.37	24.78	9.94	0.	39.63	0.824	20.	37	3		
28121 CC1222	RESIDUA	120.	0.74	0.295	1.55	31.1	2.36	1.00	1.35	24.59	10.05	0.	39.34	0.818	22.	42	3		
28121 CC0822	RESIDUA	120.	0.60	0.252	1.55	25.9	1.97	0.84	1.19	20.78	15.89	0.	40.67	0.845	20.	57	2		

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

*****LEVELIZED ANNUAL ENERGY COSTS \$/THERM*****															ROI	GROSS
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS			
SYSTEM	FUEL	REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC		ELEC				WORTH 15%	%	PAY BACK			
28121 STIG15 RESIDUA	120.	1.00	0.139	1.55	45.9	3.40	1.45	2.97	42.36	0.	0.	50.19	1.043	-19.	0	999
28121 STIG15 RESIDUA	120.	18.97	0.171	1.55	565.4	41.88	17.81	34.93	630.35	0.	-423.29	301.68	6.272	-1053.	0	58
28121 STIG10 RESIDUA	120.	1.00	0.199	1.55	42.5	3.15	1.34	2.49	39.40	0.	0.	46.38	0.964	-6.	10	9
28121 STIG10 RESIDUA	120.	1.75	0.218	1.55	62.8	4.66	1.98	3.38	61.85	0.	-17.76	54.10	1.125	-39.	0	75
28121 STIG1S RESIDUA	120.	1.00	0.227	1.55	39.5	2.93	1.24	2.33	38.04	0.	0.	44.55	0.926	2.	16	6
28121 STIG1S RESIDUA	120.	1.03	0.228	1.55	39.7	2.94	1.25	2.26	38.87	0.	-0.69	44.64	0.928	1.	16	6
28121 DEADV3 RESIDUA	120.	1.00	0.287	1.55	81.0	6.00	2.55	2.76	35.06	0.	0.	46.38	0.964	-23.	7	11
28121 DEADV3 RESIDUA	120.	1.11	0.293	1.55	87.7	6.49	2.76	2.80	37.79	0.	-2.53	47.32	0.984	-29.	6	12
28121 DEHTPM RESIDUA	120.	0.51	0.217	1.55	46.1	3.41	1.45	1.70	19.06	19.32	0.	44.94	0.934	-3.	13	7
28121 DESOA3 DISTILL	120.	1.00	0.245	1.55	101.0	7.48	3.18	3.31	45.56	0.	0.	59.54	1.238	-74.	0	71
28121 DESOA3 DISTILL	120.	1.28	0.256	1.55	124.9	9.25	3.93	3.77	54.94	0.	-6.55	65.34	1.358	-103.	0	67
28121 DESOA3 RESIDUA	120.	1.00	0.245	1.55	101.0	7.48	3.18	3.31	37.17	0.	0.	51.15	1.063	-48.	1	23
28121 DESOA3 RESIDUA	120.	1.28	0.256	1.55	124.9	9.25	3.93	3.77	44.82	0.	-6.55	55.22	1.148	-72.	0	999
28121 GTSOAD DISTILL	120.	0.41	0.164	1.55	19.0	1.41	0.60	0.86	21.67	23.26	0.	47.78	0.993	1.	999	0
28121 GTRA08 DISTILL	120.	0.66	0.251	1.55	33.4	2.48	1.05	1.26	28.90	13.16	0.	46.85	0.974	-3.	11	8
28121 GTRA12 DISTILL	120.	0.65	0.252	1.55	31.9	2.36	1.00	1.22	28.23	13.70	0.	46.51	0.967	-1.	13	7
28121 GTRA16 DISTILL	120.	0.61	0.237	1.55	32.1	2.38	1.01	1.22	27.09	15.34	0.	47.04	0.978	-3.	11	8
28121 GTR208 DISTILL	120.	0.51	0.196	1.55	25.1	1.86	0.79	1.03	24.57	19.37	0.	47.62	0.990	-1.	11	8
28121 GTR212 DISTILL	120.	0.54	0.209	1.55	27.1	2.01	0.85	1.03	25.56	17.92	0.	47.43	0.986	-1.	11	8
28121 GTR216 DISTILL	120.	0.56	0.219	1.55	29.0	2.15	0.91	1.13	25.64	17.40	0.	47.24	0.982	-2.	11	8
28121 GTRW08 DISTILL	120.	0.79	0.252	1.55	33.5	2.48	1.05	1.29	35.15	8.05	0.	48.03	0.999	-6.	5	13
28121 GTRW12 DISTILL	120.	0.81	0.275	1.55	33.8	2.51	1.07	1.30	34.58	7.42	0.	46.87	0.974	-3.	11	8
28121 GTRW16 DISTILL	120.	0.75	0.259	1.55	33.5	2.48	1.06	1.28	32.78	9.66	0.	47.26	0.983	-4.	9	9
28121 GTR308 DISTILL	120.	0.61	0.180	1.55	27.5	2.03	0.87	1.12	30.40	15.42	0.	49.84	1.036	-9.	0	61
28121 GTR312 DISTILL	120.	0.66	0.230	1.55	28.5	2.11	0.90	1.14	29.97	13.33	0.	47.46	0.987	-2.	10	9
28121 GTR316 DISTILL	120.	0.65	0.225	1.55	29.5	2.18	0.93	1.17	29.78	13.73	0.	47.78	0.993	-4.	7	10
28121 FCPADS DISTILL	120.	1.00	0.262	1.55	74.0	5.48	2.33	13.64	44.49	0.	0.	65.93	1.371	-83.	0	63
28121 FCPADS DISTILL	120.	1.45	0.279	1.55	100.9	7.48	3.18	19.18	59.09	0.	-10.52	78.40	1.630	-135.	0	62
28121 FCMCDS DISTILL	120.	1.00	0.351	1.55	78.0	5.77	2.45	12.79	39.16	0.	0.	60.19	1.251	-67.	0	71
28121 FCMCDS DISTILL	120.	1.14	0.360	1.55	86.6	6.41	2.73	14.36	43.11	0.	-3.40	63.21	1.314	-81.	0	68
28191 ONOCGN COAL-FG	30.	0.	0.	0.1	55.7	4.22	1.80	2.89	19.81	9.49	0.	38.21	1.000	0.	0	0
28191 STM141 RESIDUA	30.	1.00	0.136	0.11	34.8	2.64	1.12	1.73	37.72	0.	0.	43.22	1.131	-6.	-19	0
28191 STM141 RESIDUA	30.	1.14	0.151	0.11	33.8	2.56	1.09	1.48	38.23	0.	-0.79	42.56	1.114	-3.	-17	0
28191 STM141 COAL-FG	30.	1.00	0.136	0.11	70.8	5.38	2.29	3.93	21.90	0.	0.	33.50	0.877	7.	22	5
28191 STM141 COAL-FG	30.	1.14	0.151	0.11	66.0	5.01	2.13	3.46	22.20	0.	-0.79	32.00	0.837	14.	36	3
28191 STM141 COAL-AF	30.	1.00	0.136	0.11	51.8	3.93	1.67	3.65	21.90	0.	0.	31.15	0.815	24.	999	0
28191 STM141 COAL-AF	30.	1.14	0.151	0.11	50.7	3.85	1.64	3.31	22.20	0.	-0.79	30.20	0.790	27.	999	0
28191 STM088 RESIDUA	30.	0.66	0.090	0.11	30.1	2.29	0.97	1.38	36.49	3.24	0.	44.37	1.161	-7.	-19	0
28191 STM088 COAL-FG	30.	0.66	0.090	0.11	61.2	4.65	1.98	3.22	21.19	3.24	0.	34.27	0.897	10.	41	3
28191 STM088 COAL-AF	30.	0.66	0.090	0.11	48.5	3.68	1.57	3.19	21.19	3.24	0.	32.87	0.860	20.	999	0
28191 PFBSTM COAL-PF	30.	1.00	0.131	0.11	65.4	4.96	2.11	4.73	22.04	0.	0.	33.84	0.886	9.	28	4
28191 PFBSTM COAL-PF	30.	2.31	0.235	0.11	65.7	4.99	2.12	5.68	24.96	0.	-7.43	30.31	0.793	20.	44	3
28191 TISTMT RESIDUA	30.	1.00	0.134	0.11	92.9	7.05	3.00	3.26	37.84	0.	0.	51.14	1.338	-58.	0	59
28191 TISTMT RESIDUA	30.	3.25	0.291	0.11	178.6	13.56	5.76	5.21	46.21	0.	-12.82	57.92	1.516	-121.	0	67

HONEYWELL PAGE PRINTING SYSTEM- P1195-02

DATE 06/07/79
I&SE-PEQ-ADV-ENERGY-SYS

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.4

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

ORIGINAL PAGE IS
OF POOR QUALITY

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

ENERGY CONV		SITE- POWER		POWER FESRPOWER		CAPITAL CAPITAL		TAXES		GANDM FUEL		PURCHD		REVNU		TOTAL		NORML		PRESNT		ROI		GROSS	
SYSTEM		FUEL	REQD	GEN/	/HEAT	COST			+			ELEC								WORTH	%			PAY	
			MW	REQD	RATIO	*10**6			INSNC										15%				BACK		
28191	TISTMT	COAL	30.	1.00	0.134	0.11	132.5	10.06	4.28	5.50	21.97	0.	0.	41.81	1.094	-48.	0	28							
28191	TISTMT	COAL	30.	3.25	0.291	0.11	225.3	17.10	7.27	7.59	26.83	0.	-12.82	45.97	1.203	-106.	0	27							
28191	TIHRSG	RESIDUA	30.	1.00	0.070	0.11	111.4	8.25	3.51	3.61	40.65	0.	0.	56.03	1.466	-81.	0	59							
28191	TIHRSG	RESIDUA	30.	2.24	0.123	0.11	180.1	13.34	5.67	5.06	48.75	0.	-7.07	65.75	1.721	-144.	0	62							
28191	TIHRSG	COAL	30.	1.00	0.070	0.11	150.8	11.44	4.86	5.95	23.60	0.	0.	45.85	1.200	-70.	0	999							
28191	TIHRSG	COAL	30.	2.24	0.123	0.11	228.7	17.35	7.38	7.62	28.31	0.	-7.07	53.59	1.402	-131.	0	336							
28191	STIRL	DISTILL	30.	1.00	0.090	0.11	53.2	3.94	1.68	2.21	48.71	0.	0.	56.54	1.480	-56.	999	0							
28191	STIRL	DISTILL	30.	4.03	0.219	0.11	97.8	7.24	3.08	3.16	69.55	0.	-17.24	65.79	1.722	-105.	0	57							
28191	STIRL	RESIDUA	30.	1.00	0.090	0.11	53.2	3.94	1.68	2.21	39.74	0.	0.	47.57	1.245	-27.	119	0							
28191	STIRL	RESIDUA	30.	4.03	0.219	0.11	97.9	7.25	3.08	3.16	56.74	0.	-17.24	53.00	1.387	-65.	0	59							
28191	STIRL	COAL	30.	1.00	0.090	0.11	93.4	6.92	2.94	4.53	23.07	0.	0.	37.46	0.980	-15.	8	11							
28191	STIRL	COAL	30.	4.03	0.219	0.11	174.8	12.95	5.51	6.61	32.95	0.	-17.24	40.77	1.067	-63.	3	18							
28191	HEGT60	COAL-AF	30.	1.00	-0.006	0.11	103.9	7.89	3.35	4.79	25.53	0.	0.	41.56	1.088	-34.	0	999							
28191	HEGT60	COAL-AF	30.	17.29	-0.024	0.11	508.6	38.59	16.41	20.38	118.60	0.	-92.74	101.24	2.650	-416.	0	74							
28191	HEGT00	COAL-AF	30.	1.00	0.037	0.11	98.4	7.46	3.17	4.67	24.42	0.	0.	39.73	1.040	-25.	1	22							
28191	HEGT00	COAL-AF	30.	3.61	0.086	0.11	143.1	10.86	4.62	6.28	36.45	0.	-14.87	43.35	1.135	-58.	0	999							
28191	FCMCCL	COAL	30.	1.00	0.116	0.11	99.5	7.74	3.29	5.07	22.43	0.	0.	38.52	1.008	-23.	4	14							
28191	FCMCCL	COAL	30.	6.13	0.335	0.11	169.3	13.17	5.60	10.12	35.83	0.	-29.21	35.50	0.929	-49.	7	11							
28191	FCSTCL	COAL	30.	1.00	0.120	0.11	98.3	7.64	3.25	5.04	22.32	0.	0.	38.25	1.001	-22.	5	14							
28191	FCSTCL	COAL	30.	7.94	0.378	0.11	190.4	14.80	6.29	11.42	39.72	0.	-39.51	32.72	0.856	-50.	8	10							
28191	IGGTST	COAL	30.	1.00	0.091	0.11	94.1	7.31	3.11	4.34	23.05	0.	0.	37.81	0.990	-18.	6	12							
28191	IGGTST	COAL	30.	5.29	0.249	0.11	151.4	11.77	5.00	4.89	36.97	0.	-24.44	34.19	0.895	-35.	8	10							
28191	GTSOAR	RESIDUA	30.	1.00	0.085	0.11	42.8	3.17	1.35	1.86	39.95	0.	0.	46.33	1.213	-19.	-35	0							
28191	GTSOAR	RESIDUA	30.	7.23	0.261	0.11	87.7	6.50	2.76	2.85	76.28	0.	-35.47	52.93	1.385	-60.	0	58							
28191	GTAC08	RESIDUA	30.	1.00	0.117	0.11	40.8	3.02	1.28	1.81	38.58	0.	0.	44.69	1.170	-13.	-27	0							
28191	GTAC08	RESIDUA	30.	4.96	0.311	0.11	58.9	4.36	1.86	2.06	56.25	0.	-22.56	41.97	1.098	-13.	0	55							
28191	GTAC12	RESIDUA	30.	1.00	0.114	0.11	41.5	3.07	1.31	1.82	38.68	0.	0.	44.88	1.175	-14.	-29	0							
28191	GTAC12	RESIDUA	30.	6.24	0.333	0.11	70.8	5.24	2.23	2.38	62.56	0.	-29.81	42.61	1.115	-20.	0	58							
28191	GTAC16	RESIDUA	30.	1.00	0.109	0.11	42.3	3.14	1.33	1.84	38.91	0.	0.	45.22	1.183	-15.	-31	0							
28191	GTAC16	RESIDUA	30.	7.29	0.335	0.11	82.5	6.11	2.60	2.70	69.03	0.	-35.79	44.64	1.168	-32.	0	60							
28191	GTWC16	RESIDUA	30.	1.00	0.103	0.11	42.1	3.12	1.33	1.84	39.20	0.	0.	45.49	1.190	-16.	-31	0							
28191	GTWC16	RESIDUA	30.	7.36	0.316	0.11	76.0	5.63	2.39	2.54	71.51	0.	-36.22	45.85	1.200	-33.	0	58							
28191	CC1626	RESIDUA	30.	1.00	0.099	0.11	41.9	3.18	1.35	1.94	39.37	0.	0.	45.84	1.200	-17.	-34	0							
28191	CC1626	RESIDUA	30.	10.14	0.334	0.11	91.8	6.96	2.96	3.18	87.27	0.	-51.99	48.38	1.266	-49.	0	60							
28191	CC1622	RESIDUA	30.	1.00	0.104	0.11	42.0	3.19	1.35	1.93	39.15	0.	0.	45.62	1.194	-17.	-33	0							
28191	CC1622	RESIDUA	30.	9.08	0.341	0.11	94.1	7.14	3.04	3.14	79.71	0.	-45.98	47.05	1.231	-46.	0	61							
28191	CC1222	RESIDUA	30.	1.00	0.105	0.11	41.3	3.13	1.33	1.92	39.10	0.	0.	45.49	1.191	-16.	-32	0							
28191	CC1222	RESIDUA	30.	9.00	0.343	0.11	88.2	6.69	2.84	3.06	78.93	0.	-45.54	45.98	1.203	-40.	0	61							
28191	CC0822	RESIDUA	30.	1.00	0.113	0.11	41.1	3.12	1.32	1.92	38.76	0.	0.	45.13	1.181	-15.	-30	0							
28191	CC0822	RESIDUA	30.	7.02	0.341	0.11	69.1	5.24	2.23	2.53	66.70	0.	-34.28	42.42	1.110	-20.	0	59							
28191	DEHTPM	RESIDUA	30.	1.00	0.091	0.11	59.3	4.39	1.87	2.41	39.72	0.	0.	48.40	1.267	-33.	0	56							
28191	DEHTPM	RESIDUA	30.	5.90	0.258	0.11	166.7	12.35	5.25	5.05	67.16	0.	-27.91	61.89	1.620	-125.	0	62							
28191	GTSOAR	DISTILL	30.	1.00	0.107	0.11	40.2	2.98	1.26	1.79	47.82	0.	0.	53.86	1.409	-41.	-52	0							
28191	GTSOAR	DISTILL	30.	6.11	0.308	0.11	62.6	4.64	1.97	2.18	78.45	0.	-29.08	58.16	1.522	-65.	0	56							

HONEYWELL PAGE PRINTING SYSTEM - #1185-02

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST								PERCENT OF ORIGINAL COST 100										
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																		
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNU TOTAL NORML PRESNT ROI GROSS																
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK								
28191	GTRA08	DISTILL	30.	1.00	0.085	0.11	46.9	3.47	1.48	1.95	48.99	0.	0.	55.89	1.463	-51.	-88	0
28191	GTRA08	DISTILL	30.	12.51	0.303	0.11	137.3	10.17	4.32	4.18	131.41	0.	-65.52	84.56	2.213	-183.	0	57
28191	GTRA12	DISTILL	30.	1.00	0.090	0.11	43.8	3.25	1.38	1.88	48.71	0.	0.	55.21	1.445	-47.	-68	0
28191	GTRA12	DISTILL	30.	11.64	0.316	0.11	127.5	9.44	4.01	3.91	121.89	0.	-60.54	78.72	2.060	-160.	0	57
28191	GTRA16	DISTILL	30.	1.00	0.093	0.11	44.6	3.31	1.41	1.90	48.58	0.	0.	55.19	1.444	-47.	-71	0
28191	GTRA16	DISTILL	30.	10.48	0.316	0.11	125.1	9.26	3.94	3.83	112.58	0.	-53.94	75.66	1.980	-149.	0	57
28191	GTR208	DISTILL	30.	1.00	0.095	0.11	42.6	3.15	1.34	1.85	48.47	0.	0.	54.81	1.434	-45.	-61	0
28191	GTR208	DISTILL	30.	8.24	0.302	0.11	94.1	6.97	2.96	3.02	96.52	0.	-41.19	63.28	1.787	-111.	0	57
28191	GTR212	DISTILL	30.	1.00	0.095	0.11	43.1	3.19	1.36	1.86	48.47	0.	0.	54.88	1.436	-46.	-64	0
28191	GTR212	DISTILL	30.	8.85	0.309	0.11	101.6	7.53	3.20	3.22	100.57	0.	-44.68	69.83	1.828	-120.	0	57
28191	GTR216	DISTILL	30.	1.00	0.097	0.11	43.8	3.24	1.38	1.88	48.38	0.	0.	54.88	1.436	-46.	-66	0
28191	GTR216	DISTILL	30.	9.13	0.317	0.11	109.7	8.12	3.45	3.42	101.63	0.	-46.29	70.33	1.841	-125.	0	57
28191	GTRW08	DISTILL	30.	1.00	0.073	0.11	46.7	3.46	1.47	1.95	49.63	0.	0.	56.51	1.479	-52.	-89	0
28191	GTRW08	DISTILL	30.	14.52	0.268	0.11	132.9	9.85	4.19	4.12	155.09	0.	-76.94	96.30	2.520	-217.	0	57
28191	GTRW12	DISTILL	30.	1.00	0.082	0.11	46.7	3.46	1.47	1.95	49.7	0.	0.	56.05	1.467	-51.	-87	0
28191	GTRW12	DISTILL	30.	14.13	0.298	0.11	130.3	9.65	4.10	4.03	145.55	0.	-74.72	88.61	2.319	-192.	0	57
28191	GTRW16	DISTILL	30.	1.00	0.085	0.11	47.2	3.50	1.49	1.96	49.01	0.	0.	55.96	1.464	-51.	-91	0
28191	GTRW16	DISTILL	30.	12.58	0.302	0.11	125.7	9.31	3.96	3.89	132.11	0.	-65.90	83.37	2.182	-174.	0	57
28191	GTR308	DISTILL	30.	1.00	0.066	0.11	42.6	3.15	1.34	1.86	49.99	0.	0.	56.35	1.475	-50.	-66	0
28191	GTR308	DISTILL	30.	10.63	0.227	0.11	104.0	7.70	3.28	3.34	128.59	0.	-54.81	88.10	2.305	-178.	0	56
28191	GTR312	DISTILL	30.	1.00	0.090	0.11	42.5	3.15	1.34	1.85	48.74	0.	0.	55.07	1.441	-46.	-62	0
28191	GTR312	DISTILL	30.	10.31	0.305	0.11	96.3	7.13	3.03	3.11	113.02	0.	-52.98	73.32	1.919	-128.	0	57
28191	GTR316	DISTILL	30.	1.00	0.089	0.11	43.1	3.20	1.36	1.86	48.76	0.	0.	55.17	1.444	-47.	-65	0
28191	GTR316	DISTILL	30.	10.12	0.302	0.11	98.8	7.32	3.11	3.17	111.94	0.	-51.91	73.64	1.927	-130.	0	57
28191	FCPADS	DISTILL	30.	1.00	0.071	0.11	54.8	4.06	1.73	4.74	49.73	0.	0.	60.25	1.577	-68.	999	0
28191	FCPADS	DISTILL	30.	21.20	0.279	0.11	339.4	25.14	10.69	66.90	209.15	0.	-114.95	196.94	5.154	-638.	0	59
28191	FCMCDS	DISTILL	30.	1.00	0.095	0.11	55.8	4.13	1.76	4.55	48.44	0.	0.	58.88	1.541	-64.	999	0
28191	FCMCDS	DISTILL	30.	16.77	0.360	0.11	304.0	22.52	9.57	50.30	152.60	0.	-89.74	145.25	3.801	-457.	0	60
28192	OMCCGH	COAL-FG	61.	0.	0.	0.11	110.4	8.38	3.56	5.16	39.65	18.97	0.	75.72	1.000	0.	0	0
28192	STM141	RESIDUA	61.	1.00	0.136	0.11	60.9	4.62	1.96	2.59	75.48	0.	0.	84.66	1.118	-4.	-16	0
28192	STM141	RESIDUA	61.	1.14	0.151	0.11	60.0	4.55	1.93	2.28	76.49	0.	-1.60	83.66	1.105	-0.	-15	0
28192	STM141	COAL-FG	61.	1.00	0.136	0.11	125.7	9.54	4.05	6.46	43.83	0.	0.	63.86	0.844	30.	44	3
28192	STM141	COAL-FG	61.	1.14	0.151	0.11	128.5	9.75	4.15	6.10	44.41	0.	-1.60	62.82	0.830	32.	41	3
28192	STM141	COAL-AF	61.	1.00	0.136	0.11	96.0	7.28	3.10	6.21	43.83	0.	0.	60.42	0.798	55.	999	0
28192	STM141	COAL-AF	61.	1.14	0.151	0.11	92.2	7.00	2.98	5.78	44.41	0.	-1.60	58.58	0.774	62.	999	0
28192	STM088	RESIDUA	61.	0.66	0.090	0.11	54.0	4.10	1.74	2.12	73.03	6.48	0.	87.47	1.155	-10.	-17	0
28192	STM088	COAL-FG	61.	0.66	0.090	0.11	120.1	9.11	3.88	5.66	42.40	6.48	0.	67.53	0.892	21.	47	3
28192	STM088	COAL-AF	61.	0.66	0.090	0.11	89.0	6.75	2.87	5.58	42.40	6.48	0.	64.08	0.846	47.	999	0
28192	PFBSTM	COAL-PF	61.	1.00	0.131	0.11	115.6	8.78	3.73	8.09	44.11	0.	0.	64.71	0.855	32.	99	1
28192	PFBSTM	COAL-PF	61.	2.31	0.235	0.11	117.2	8.89	3.78	10.37	49.94	0.	-14.87	58.11	0.767	51.	119	1
28192	TISTMT	RESIDUA	61.	1.00	0.134	0.11	159.1	12.07	5.13	5.15	75.72	0.	0.	98.07	1.295	-93.	0	58
28192	TISTMT	RESIDUA	61.	3.25	0.291	0.11	354.3	26.89	11.43	9.84	92.47	0.	-25.67	114.96	1.518	-240.	0	67
28192	TISTMT	COAL	61.	1.00	0.134	0.11	227.1	17.23	7.33	8.99	43.96	0.	0.	77.52	1.024	-62.	4	16
28192	TISTMT	COAL	61.	3.25	0.291	0.11	447.9	33.99	14.45	14.34	53.69	0.	-25.67	90.80	1.199	-209.	0	27

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC					WORTH	%	PAY					
		MW										15%		BACK					
28192 TIHRSG	RESIDUA	61.	1.00	0.069	0.11	193.4	14.32	6.09	5.88	81.33	0.	0.	107.63	1.421	-137.	0	58		
28192 TIHRSG	RESIDUA	61.	2.24	0.123	0.11	359.6	26.63	11.32	9.71	97.55	0.	-14.15	131.06	1.731	-288.	0	62		
28192 TIHRSG	COAL	61.	1.00	0.069	0.11	262.8	19.94	8.48	9.94	47.22	0.	0.	85.58	1.130	-104.	0	999		
28192 TIHRSG	COAL	61.	2.24	0.123	0.11	457.0	34.68	14.74	14.58	56.64	0.	-14.15	106.49	1.406	-263.	0	342		
28192 STIRL	DISTILL	61.	1.00	0.090	0.11	100.1	7.41	3.15	3.62	97.46	0.	0.	111.65	1.474	-106.	132	0		
28192 STIRL	DISTILL	61.	4.03	0.219	0.11	191.9	14.21	6.04	5.71	139.18	0.	-34.51	130.63	1.725	-209.	0	57		
28192 STIRL	RESIDUA	61.	1.00	0.090	0.11	100.1	7.42	3.15	3.62	79.51	0.	0.	93.70	1.237	-50.	-72	0		
28192 STIRL	RESIDUA	61.	4.03	0.219	0.11	192.1	14.23	6.05	5.72	113.54	0.	-34.51	105.02	1.387	-129.	0	58		
28192 STIRL	COAL	61.	1.00	0.090	0.11	176.1	13.04	5.54	7.78	46.17	0.	0.	72.53	0.958	-20.	9	10		
28192 STIRL	COAL	61.	4.03	0.219	0.11	344.6	25.52	10.85	12.33	65.93	0.	-34.51	80.12	1.058	-122.	3	17		
28192 HEGT60	COAL-AF	61.	1.00	-0.006	0.11	187.0	14.19	6.03	8.21	51.07	0.	0.	79.51	1.050	-49.	0	30		
28192 HEGT60	COAL-AF	61.	17.30	-0.024	0.11	1017.5	77.21	32.83	40.06	237.33	0.	-185.58	201.85	2.666	-832.	0	74		
28192 HEGT00	COAL-AF	61.	1.00	0.037	0.11	167.6	12.72	5.41	7.77	48.86	0.	0.	74.76	0.987	-25.	6	12		
28192 HEGT00	COAL-AF	61.	3.61	0.086	0.11	234.2	17.78	7.56	10.80	72.94	0.	-29.76	79.32	1.048	-71.	2	20		
28192 FCMCCL	COAL	61.	1.00	0.116	0.11	172.6	13.42	5.70	8.62	44.87	0.	0.	72.61	0.959	-22.	8	10		
28192 FCMCCL	COAL	61.	6.14	0.335	0.11	283.0	22.00	9.35	18.31	71.70	0.	-58.46	62.90	0.831	-47.	10	9		
28192 FCSTCL	COAL	61.	1.00	0.120	0.11	170.7	13.27	5.64	8.49	44.66	0.	0.	72.07	0.952	-20.	9	9		
28192 FCSTCL	COAL	61.	7.95	0.378	0.11	318.2	24.74	10.52	20.58	79.48	0.	-79.06	56.26	0.743	-44.	11	8		
28192 IGGTST	COAL	61.	1.00	0.091	0.11	160.6	12.49	5.31	6.91	46.13	0.	0.	70.84	0.935	-11.	11	8		
28192 IGGTST	COAL	61.	5.30	0.249	0.11	279.1	21.70	9.23	8.34	73.97	0.	-48.91	64.32	0.849	-48.	9	9		
28192 GTSOAR	RESIDUA	61.	1.00	0.085	0.11	79.2	5.87	2.49	2.98	79.94	0.	0.	91.29	1.206	-33.	-30	0		
28192 GTSOAR	RESIDUA	61.	7.24	0.261	0.11	157.5	11.67	4.96	4.78	152.64	0.	-70.98	103.07	1.361	-106.	0	57		
28192 GTAC08	RESIDUA	61.	1.00	0.117	0.11	75.6	5.60	2.38	2.89	77.20	0.	0.	88.07	1.163	-21.	-24	0		
28192 GTAC08	RESIDUA	61.	4.97	0.311	0.11	109.6	8.12	3.45	3.50	112.55	0.	-45.16	82.46	1.089	-19.	-93	0		
28192 GTAC12	RESIDUA	61.	1.00	0.114	0.11	77.4	5.73	2.44	2.93	77.40	0.	0.	88.50	1.169	-23.	-25	0		
28192 GTAC12	RESIDUA	61.	6.24	0.333	0.11	132.6	9.82	4.18	4.10	125.18	0.	-59.66	83.63	1.104	-34.	0	57		
28192 GTAC16	RESIDUA	61.	1.00	0.109	0.11	79.1	5.86	2.49	2.97	77.86	0.	0.	89.18	1.178	-26.	-27	0		
28192 GTAC16	RESIDUA	61.	7.29	0.335	0.11	159.4	11.81	5.02	4.80	138.12	0.	-71.63	88.13	1.164	-60.	0	60		
28192 GTWC16	RESIDUA	61.	1.00	0.103	0.11	77.8	5.76	2.45	2.94	78.44	0.	0.	89.58	1.183	-27.	-27	0		
28192 GTWC16	RESIDUA	61.	7.37	0.316	0.11	140.0	10.37	4.41	4.33	143.09	0.	-72.48	89.72	1.185	-56.	0	57		
28192 CC1626	RESIDUA	61.	1.00	0.099	0.11	77.6	5.89	2.50	3.05	78.77	0.	0.	90.21	1.191	-29.	-29	0		
28192 CC1626	RESIDUA	61.	10.14	0.334	0.11	166.5	12.64	5.37	5.31	174.64	0.	-104.05	93.91	1.240	-84.	0	59		
28192 CC1622	RESIDUA	61.	1.00	0.104	0.11	78.5	5.96	2.53	3.06	78.33	0.	0.	89.87	1.187	-29.	-29	0		
28192 CC1622	RESIDUA	61.	9.08	0.341	0.11	170.1	12.91	5.49	5.23	159.50	0.	-92.01	91.12	1.203	-77.	0	60		
28192 CC1222	RESIDUA	61.	1.00	0.105	0.11	77.3	5.86	2.49	3.04	78.24	0.	0.	89.64	1.184	-28.	-28	0		
28192 CC1222	RESIDUA	61.	9.01	0.343	0.11	157.8	11.98	5.09	5.05	157.93	0.	-91.14	88.91	1.174	-64.	0	60		
28192 CC0822	RESIDUA	61.	1.00	0.113	0.11	76.2	5.78	2.46	3.02	77.56	0.	0.	88.83	1.173	-24.	-26	0		
28192 CC0822	RESIDUA	61.	7.03	0.341	0.11	129.4	9.82	4.18	4.27	133.47	0.	-68.61	83.12	1.098	-32.	0	58		
28192 DEHTPM	RESIDUA	61.	1.00	0.091	0.11	115.4	8.55	3.63	4.06	79.47	0.	0.	95.72	1.264	-64.	0	55		
28192 DEHTPM	RESIDUA	61.	5.91	0.258	0.11	328.7	24.35	10.35	9.35	134.38	0.	-55.86	122.57	1.619	-247.	0	62		
28192 GTSOAD	DISTILL	61.	1.00	0.107	0.11	74.9	5.55	2.36	2.87	95.69	0.	0.	106.47	1.406	-78.	-46	0		
28192 GTSOAD	DISTILL	61.	6.11	0.308	0.11	119.8	8.88	3.77	3.79	156.98	0.	-58.19	115.23	1.522	-127.	0	56		
28192 GTRA08	DISTILL	61.	1.00	0.085	0.11	84.3	6.25	2.66	3.09	98.02	0.	0.	110.02	1.453	-94.	-64	0		
28192 GTRA08	DISTILL	61.	12.52	0.303	0.11	249.4	18.47	7.85	7.19	262.95	0.	-131.11	165.37	2.184	-344.	0	57		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW											15%		BACK				
28192 GTRA12	DISTILL	61.	1.00	0.090	0.11	81.5	6.04	2.57	3.02	97.46	0.	0.	109.09	1.441	-90.	-57	0		
28192 GTRA12	DISTILL	61.	11.64	0.316	0.11	234.0	17.33	7.37	6.78	243.91	0.	-121.16	154.24	2.037	-302.	0	57		
28192 GTRA16	DISTILL	61.	1.00	0.093	0.11	82.8	6.13	2.61	3.06	97.21	0.	0.	109.00	1.440	-90.	-59	0		
28192 GTRA16	DISTILL	61.	10.48	0.316	0.11	224.0	16.59	7.05	6.51	225.27	0.	-107.95	147.47	1.947	-276.	0	57		
28192 GTR208	DISTILL	61.	1.00	0.095	0.11	79.1	5.86	2.49	2.97	96.98	0.	0.	108.30	1.430	-86.	-53	0		
28192 GTR208	DISTILL	61.	8.24	0.302	0.11	169.7	12.57	5.34	5.10	193.14	0.	-82.43	133.73	1.766	-208.	0	56		
28192 GTR212	DISTILL	61.	1.00	0.095	0.11	80.0	5.93	2.52	2.99	96.98	0.	0.	108.42	1.432	-87.	-54	0		
28192 GTR212	DISTILL	61.	8.85	0.309	0.11	180.7	13.38	5.69	5.39	201.23	0.	-89.41	136.28	1.800	-221.	0	57		
28192 GTR216	DISTILL	61.	1.00	0.097	0.11	81.4	6.03	2.56	3.02	96.80	0.	0.	108.41	1.432	-87.	-56	0		
28192 GTR216	DISTILL	61.	9.14	0.317	0.11	196.2	14.53	6.18	5.78	203.36	0.	-92.64	137.21	1.812	-231.	0	57		
28192 GTRW08	DISTILL	61.	1.00	0.073	0.11	83.5	6.19	2.63	3.08	99.31	0.	0.	111.20	1.469	-97.	-64	0		
28192 GTRW08	DISTILL	61.	14.53	0.268	0.11	241.9	17.92	7.62	7.06	310.34	0.	-153.96	188.98	2.496	-415.	0	57		
28192 GTRW12	DISTILL	61.	1.00	0.082	0.11	83.5	6.18	2.63	3.07	98.39	0.	0.	110.27	1.456	-94.	-62	0		
28192 GTRW12	DISTILL	61.	14.14	0.298	0.11	229.0	16.96	7.21	6.72	291.24	0.	-149.53	172.60	2.279	-358.	0	57		
28192 GTRW16	DISTILL	61.	1.00	0.085	0.11	84.3	6.24	2.65	3.09	98.06	0.	0.	110.05	1.453	-94.	-64	0		
28192 GTRW16	DISTILL	61.	12.58	0.302	0.11	220.7	16.34	6.95	6.48	264.36	0.	-131.87	162.26	2.143	-321.	0	57		
28192 GTR308	DISTILL	61.	1.00	0.066	0.11	78.9	5.84	2.48	2.98	100.03	0.	0.	111.33	1.470	-95.	-57	0		
28192 GTR308	DISTILL	61.	10.64	0.227	0.11	180.5	13.37	5.68	5.46	257.31	0.	-109.69	172.13	2.273	-333.	0	56		
28192 GTR312	DISTILL	61.	1.00	0.090	0.11	78.6	5.82	2.47	2.95	97.52	0.	0.	108.77	1.436	-87.	-53	0		
28192 GTR312	DISTILL	61.	10.31	0.305	0.11	173.0	12.82	5.45	5.23	226.15	0.	-106.01	143.63	1.897	-241.	0	56		
28192 GTR316	DISTILL	61.	1.00	0.089	0.11	79.6	5.89	2.51	2.98	97.56	0.	0.	108.94	1.439	-88.	-54	0		
28192 GTR316	DISTILL	61.	10.12	0.302	0.11	178.2	13.20	5.61	5.36	223.99	0.	-103.87	144.29	1.906	-245.	0	56		
28192 FCPADS	DISTILL	61.	1.00	0.071	0.11	103.0	7.63	3.24	8.84	99.49	0.	0.	119.21	1.574	-132.	202	0		
28192 FCPADS	DISTILL	61.	21.21	0.279	0.11	659.3	48.83	20.76	133.06	418.52	0.	-230.02	391.16	5.166	-1261.	0	59		
28192 FCNCDS	DISTILL	61.	1.00	0.095	0.11	105.2	7.79	3.31	8.47	96.92	0.	0.	116.49	1.538	-125.	999	0		
28192 FCNCDS	DISTILL	61.	16.78	0.360	0.11	578.8	42.87	18.23	99.62	305.36	0.	-179.58	266.50	3.784	-891.	0	60		
28212 ONOCGN	COAL-FG	4.	0.	0.	0.07	16.1	1.22	0.52	1.04	4.27	1.28	0.	8.33	1.000	0.	0	0		
28212 STM141	RESIDUA	4.	1.00	0.093	0.07	9.7	0.74	0.31	0.80	7.84	0.	0.	9.69	1.164	-1.	-18	0		
28212 STM141	RESIDUA	4.	2.65	0.198	0.07	9.8	0.75	0.32	0.65	8.64	0.	-1.27	9.09	1.092	1.	-13	0		
28212 STM141	COAL-FG	4.	1.00	0.093	0.07	21.7	1.65	0.70	1.58	4.55	0.	0.	8.47	1.018	-3.	2	19		
28212 STM141	COAL-FG	4.	2.65	0.198	0.07	20.1	1.52	0.65	1.30	5.02	0.	-1.27	7.22	0.868	2.	21	5		
28212 STM141	COAL-AF	4.	1.00	0.093	0.07	19.7	1.49	0.63	1.48	4.55	0.	0.	8.16	0.980	-1.	8	10		
28212 STM141	COAL-AF	4.	2.65	0.198	0.07	14.9	1.13	0.48	1.16	5.02	0.	-1.27	6.52	0.783	6.	999	0		
28212 STM088	RESIDUA	4.	1.00	0.093	0.07	9.4	0.72	0.30	0.80	7.84	0.	0.	9.66	1.160	-1.	-17	0		
28212 STM088	RESIDUA	4.	1.83	0.151	0.07	8.7	0.66	0.28	0.62	8.24	0.	-0.63	9.17	1.101	1.	-12	0		
28212 STM088	COAL-FG	4.	1.00	0.093	0.07	21.4	1.62	0.69	1.57	4.55	0.	0.	8.43	1.012	-3.	3	17		
28212 STM088	COAL-FG	4.	1.83	0.151	0.07	18.5	1.40	0.60	1.23	4.78	0.	-0.63	7.38	0.886	2.	26	4		
28212 STM088	COAL-AF	4.	1.00	0.093	0.07	18.9	1.43	0.61	1.48	4.55	0.	0.	8.07	0.969	-1.	11	8		
28212 STM088	COAL-AF	4.	1.83	0.151	0.07	14.0	1.06	0.45	1.12	4.78	0.	-0.63	6.78	0.815	6.	999	0		
28212 PFBSTM	COAL-PF	4.	1.00	0.090	0.07	21.9	1.66	0.71	1.60	4.56	0.	0.	8.53	1.025	-3.	2	22		
28212 PFBSTM	COAL-PF	4.	4.57	0.270	0.07	24.6	1.87	0.79	1.86	5.61	0.	-2.74	7.40	0.889	-1.	12	8		
28212 TISTMT	RESIDUA	4.	1.00	0.091	0.07	19.7	1.50	0.64	1.03	7.85	0.	0.	11.01	1.323	-10.	0	57		
28212 TISTMT	RESIDUA	4.	6.21	0.319	0.07	57.8	4.39	1.87	1.89	10.45	0.	-4.00	14.60	1.754	-40.	0	69		
28212 TISTMT	COAL	4.	1.00	0.091	0.07	32.1	2.44	1.04	1.79	4.56	0.	0.	9.83	1.181	-12.	0	262		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	REQD	/HEAT COST	RATIO *10**6	INSNC		ELEC								WORTH	%	PAY
		MW															15%		BACK
28212 TISTMT COAL		4.	6.21	0.319	0.07	73.5	5.58	2.37	2.69	6.07	0.	-4.00	12.71	1.527	-41.	0			999
28212 TIHRSG RESIDUA		4.	1.00	0.060	0.07	25.6	1.90	0.81	1.11	8.13	0.	0.	11.94	1.434	-16.	0			58
28212 TIHRSG RESIDUA		4.	3.41	0.149	0.07	53.3	3.95	1.68	1.65	9.99	0.	-1.85	15.41	1.851	-39.	0			63
28212 TIHRSG COAL		4.	1.00	0.060	0.07	39.2	2.98	1.26	1.92	4.72	0.	0.	10.87	1.306	-19.	0			97
28212 TIHRSG COAL		4.	3.41	0.149	0.07	68.4	5.19	2.21	2.43	5.80	0.	-1.85	13.78	1.655	-42.	0			104
28212 STIRL DISTILL		4.	1.00	0.064	0.07	10.4	0.77	0.33	0.75	9.91	0.	0.	11.76	1.413	-8.	-35			0
28212 STIRL DISTILL		4.	7.35	0.243	0.07	22.8	1.69	0.72	0.98	15.60	0.	-4.87	14.13	1.697	-21.	0			56
28212 STIRL RESIDUA		4.	1.00	0.064	0.07	10.4	0.77	0.33	0.75	8.08	0.	0.	9.93	1.193	-2.	-21			0
28212 STIRL RESIDUA		4.	7.35	0.243	0.07	22.9	1.69	0.72	0.98	12.73	0.	-4.87	11.26	1.352	-12.	0			58
28212 STIRL COAL		4.	1.00	0.064	0.07	21.6	1.60	0.68	1.47	4.69	0.	0.	8.44	1.014	-3.	3			18
28212 STIRL COAL		4.	7.35	0.243	0.07	40.5	3.00	1.27	1.90	7.39	0.	-4.87	8.69	1.044	-12.	4			16
28212 HEGT60 COAL-AF		4.	1.00	0.015	0.07	27.3	2.07	0.88	1.53	4.94	0.	0.	9.42	1.132	-9.	0			156
28212 HEGT60 COAL-AF		4.	16.90	0.077	0.07	97.8	7.42	3.15	3.81	15.61	0.	-12.19	17.60	2.138	-69.	0			88
28212 HEGT00 COAL-AF		4.	1.00	0.030	0.07	26.5	2.01	0.86	1.52	4.87	0.	0.	9.26	1.113	-8.	0			***
28212 HEGT00 COAL-AF		4.	5.61	0.099	0.07	46.6	3.54	1.50	1.97	7.62	0.	-3.53	11.10	1.333	-23.	0			249
28212 FCMCCL COAL		4.	1.00	0.079	0.07	27.1	2.10	0.89	1.60	4.62	0.	0.	9.21	1.107	-8.	0			999
28212 FCMCCL COAL		4.	9.77	0.336	0.07	54.4	4.23	1.80	2.90	7.69	0.	-6.72	9.90	1.189	-24.	1			24
28212 FCSTCL COAL		4.	1.00	0.082	0.07	26.5	2.06	0.88	1.63	4.60	0.	0.	9.17	1.102	-6.	0			999
28212 FCSTCL COAL		4.	14.02	0.392	0.07	64.1	4.98	2.12	3.48	8.97	0.	-9.99	9.56	1.148	-28.	3			18
28212 IGGTST COAL		4.	1.00	0.064	0.07	26.3	2.05	0.87	1.62	4.69	0.	0.	9.23	1.109	-8.	0			999
28212 IGGTST COAL		4.	9.62	0.271	0.07	50.6	3.94	1.67	1.97	8.35	0.	-6.61	9.32	1.120	-20.	2			19
28212 GTSOAR RESIDUA		4.	1.00	0.063	0.07	10.0	0.74	0.32	0.70	8.10	0.	0.	9.85	1.184	-2.	-19			0
28212 GTSOAR RESIDUA		4.	10.83	0.278	0.07	20.1	1.49	0.63	0.87	15.39	0.	-7.53	10.84	1.302	-10.	0			57
28212 GTAC08 RESIDUA		4.	1.00	0.080	0.07	9.6	0.71	0.30	0.69	7.95	0.	0.	9.65	1.159	-1.	-17			0
28212 GTAC08 RESIDUA		4.	7.94	0.311	0.07	15.1	1.12	0.48	0.72	12.12	0.	-5.32	9.11	1.094	-2.	-34			0
28212 GTAC12 RESIDUA		4.	1.00	0.078	0.07	9.5	0.71	0.30	0.68	7.97	0.	0.	9.66	1.160	-1.	-17			0
28212 GTAC12 RESIDUA		4.	10.00	0.332	0.07	17.8	1.32	0.56	0.80	13.50	0.	-6.90	9.29	1.116	-4.	0			56
28212 GTAC16 RESIDUA		4.	1.00	0.075	0.07	9.6	0.71	0.30	0.68	7.99	0.	0.	9.69	1.164	-1.	-17			0
28212 GTAC16 RESIDUA		4.	11.49	0.338	0.07	20.5	1.52	0.65	0.87	14.66	0.	-8.04	9.66	1.160	-6.	0			58
28212 GTWC16 RESIDUA		4.	1.00	0.070	0.07	9.9	0.73	0.31	0.69	8.04	0.	0.	9.78	1.174	-1.	-18			0
28212 GTWC16 RESIDUA		4.	11.79	0.316	0.07	20.1	1.49	0.63	0.87	15.43	0.	-8.28	10.14	1.218	-7.	0			57
28212 CC1626 RESIDUA		4.	1.00	0.068	0.07	9.8	0.74	0.32	0.76	8.05	0.	0.	9.87	1.185	-2.	-19			0
28212 CC1626 RESIDUA		4.	17.74	0.347	0.07	26.1	1.98	0.84	1.19	19.72	0.	-12.84	10.90	1.309	-13.	0			61
28212 CC1622 RESIDUA		4.	1.00	0.072	0.07	9.6	0.73	0.31	0.75	8.02	0.	0.	9.81	1.178	-1.	-18			0
28212 CC1622 RESIDUA		4.	15.94	0.354	0.07	25.5	1.94	0.82	1.14	18.00	0.	-11.45	10.44	1.254	-11.	0			62
28212 CC1222 RESIDUA		4.	1.00	0.072	0.07	9.4	0.71	0.30	0.75	8.02	0.	0.	9.78	1.175	-1.	-18			0
28212 CC1222 RESIDUA		4.	15.84	0.357	0.07	24.2	1.83	0.78	1.12	17.84	0.	-11.38	10.19	1.224	-10.	0			61
28212 CC0822 RESIDUA		4.	1.00	0.078	0.07	9.6	0.73	0.31	0.76	7.97	0.	0.	9.76	1.173	-1.	-18			0
28212 CC0822 RESIDUA		4.	12.52	0.358	0.07	20.3	1.54	0.66	1.00	15.07	0.	-8.83	9.43	1.133	-5.	0			60
28212 STIG15 RESIDUA		4.	1.00	0.026	0.07	9.7	0.72	0.31	0.72	8.42	0.	0.	10.16	1.221	-3.	-21			0
28212 STIG15 RESIDUA		4.	444.51	0.171	0.07	442.5	32.77	13.93	27.14	480.80	0.	-340.07	214.58	25.774	-848.	0			58
28212 STIG10 RESIDUA		4.	1.00	0.037	0.07	9.5	0.70	0.30	0.70	8.32	0.	0.	10.03	1.205	-2.	-19			0
28212 STIG10 RESIDUA		4.	41.11	0.218	0.07	48.8	3.62	1.54	2.69	47.17	0.	-30.75	24.27	2.915	-65.	0			58
28212 STIG1S RESIDUA		4.	1.00	0.042	0.07	9.4	0.70	0.30	0.70	8.28	0.	0.	9.98	1.199	-2.	-19			0

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST														
		MW	REQD	RATIO	*10**6		INSNC		ELEC						WORTH	%	PAY	BACK	
															15%				
28212 STIG1S	RESIDUA	4.	24.12	0.228	0.07	29.7	2.20	0.93	1.79	29.65	0.	-17.73	16.84	2.023	-33.	0	57		
28212 DEADV3	RESIDUA	4.	1.00	0.048	0.07	12.3	0.91	0.39	0.78	8.23	0.	0.	10.30	1.237	-4.	-30	0		
28212 DEADV3	RESIDUA	4.	31.04	0.271	0.07	82.1	6.08	2.58	2.64	34.48	0.	-23.03	22.75	2.733	-76.	0	62		
28212 DEHTPM	RESIDUA	4.	1.00	0.071	0.07	12.7	0.94	0.40	0.82	8.03	0.	0.	10.19	1.224	-4.	-31	0		
28212 DEHTPM	RESIDUA	4.	10.77	0.312	0.07	36.7	2.72	1.16	1.42	14.61	0.	-7.49	12.42	1.491	-22.	0	63		
28212 DESOA3	DISTILL	4.	1.00	0.040	0.07	11.3	0.84	0.36	0.75	10.17	0.	0.	12.12	1.456	-9.	-43	0		
28212 DESOA3	DISTILL	4.	37.17	0.232	0.07	121.1	8.97	3.81	3.66	52.02	0.	-27.74	40.73	4.893	-151.	0	59		
28212 DESOA3	RESIDUA	4.	1.00	0.040	0.07	11.3	0.84	0.36	0.75	8.30	0.	0.	10.25	1.231	-4.	-26	0		
28212 DESOA3	RESIDUA	4.	37.17	0.232	0.07	121.1	8.97	3.81	3.66	42.43	0.	-27.74	31.15	3.742	-120.	0	62		
28212 GTSOAD	DISTILL	4.	1.00	0.073	0.07	9.4	0.69	0.29	0.68	9.82	0.	0.	11.48	1.379	-7.	-29	0		
28212 GTSOAD	DISTILL	4.	9.71	0.310	0.07	15.9	1.18	0.50	0.75	16.80	0.	-6.68	12.55	1.508	-13.	999	0		
28212 GTRA08	DISTILL	4.	1.00	0.064	0.07	10.2	0.75	0.32	0.69	9.91	0.	0.	11.68	1.403	-8.	-33	0		
28212 GTRA08	DISTILL	4.	17.44	0.325	0.07	30.0	2.22	0.95	1.16	24.68	0.	-12.61	16.40	1.970	-32.	0	57		
28212 GTRA12	DISTILL	4.	1.00	0.067	0.07	10.1	0.75	0.32	0.69	9.89	0.	0.	11.64	1.399	-7.	-33	0		
28212 GTRA12	DISTILL	4.	16.73	0.334	0.07	28.1	2.08	0.88	1.10	23.60	0.	-12.06	15.61	1.875	-28.	0	57		
28212 GTRA16	DISTILL	4.	1.00	0.068	0.07	10.3	0.76	0.32	0.70	9.88	0.	0.	11.66	1.401	-8.	-34	0		
28212 GTRA16	DISTILL	4.	15.40	0.331	0.07	28.0	2.07	0.88	1.09	22.29	0.	-11.04	15.30	1.837	-27.	0	57		
28212 GTR208	DISTILL	4.	1.00	0.068	0.07	9.9	0.73	0.31	0.69	9.87	0.	0.	11.61	1.394	-7.	-32	0		
28212 GTR208	DISTILL	4.	12.51	0.313	0.07	21.6	1.60	0.68	0.91	19.75	0.	-8.82	14.11	1.695	-20.	0	56		
28212 GTR212	DISTILL	4.	1.00	0.068	0.07	10.0	0.74	0.32	0.69	9.87	0.	0.	11.62	1.396	-7.	-32	0		
28212 GTR212	DISTILL	4.	13.42	0.320	0.07	23.3	1.73	0.73	0.96	20.54	0.	-9.52	14.44	1.735	-22.	0	57		
28212 GTR216	DISTILL	4.	1.00	0.069	0.07	10.1	0.75	0.32	0.69	9.86	0.	0.	11.62	1.396	-7.	-33	0		
28212 GTR216	DISTILL	4.	13.79	0.328	0.07	24.9	1.85	0.78	1.00	20.27	0.	-9.81	14.50	1.741	-23.	0	57		
28212 GTRW08	DISTILL	4.	1.00	0.054	0.07	10.2	0.76	0.32	0.70	10.02	0.	0.	11.79	1.417	-8.	-35	0		
28212 GTRW03	DISTILL	4.	20.60	0.286	0.07	29.9	2.22	0.94	1.18	29.65	0.	-15.03	18.96	2.276	-40.	0	57		
28212 GTRW12	DISTILL	4.	1.00	0.059	0.07	10.2	0.76	0.32	0.70	9.96	0.	0.	11.74	1.410	-8.	-34	0		
28212 GTRW12	DISTILL	4.	20.61	0.312	0.07	29.8	2.21	0.94	1.17	28.60	0.	-15.04	17.89	2.149	-36.	0	57		
28212 GTRW16	DISTILL	4.	1.00	0.061	0.07	10.4	0.77	0.33	0.70	9.95	0.	0.	11.75	1.411	-8.	-35	0		
28212 GTRW16	DISTILL	4.	18.91	0.312	0.07	29.3	2.17	0.92	1.15	26.62	0.	-13.66	17.20	2.066	-34.	0	57		
28212 GTR308	DISTILL	4.	1.00	0.050	0.07	9.9	0.74	0.31	0.69	10.07	0.	0.	11.81	1.419	-8.	-34	0		
28212 GTR308	DISTILL	4.	15.59	0.244	0.07	24.3	1.80	0.77	1.02	25.41	0.	-11.19	17.81	2.139	-33.	0	56		
28212 GTR312	DISTILL	4.	1.00	0.063	0.07	10.0	0.74	0.32	0.69	9.93	0.	0.	11.68	1.403	-7.	-33	0		
28212 GTR312	DISTILL	4.	16.01	0.310	0.07	24.4	1.81	0.77	1.01	23.64	0.	-11.51	15.72	1.888	-27.	0	56		
28212 GTR316	DISTILL	4.	1.00	0.062	0.07	10.2	0.76	0.32	0.70	9.93	0.	0.	11.71	1.406	-8.	-34	0		
28212 GTR316	DISTILL	4.	15.74	0.307	0.07	25.2	1.86	0.79	1.03	23.46	0.	-11.30	15.84	1.902	-28.	0	57		
28212 FCPADS	DISTILL	4.	1.00	0.049	0.07	10.5	0.78	0.33	1.00	10.08	0.	0.	12.19	1.464	-9.	-39	0		
28212 FCPADS	DISTILL	4.	33.90	0.279	0.07	79.4	5.88	2.50	14.73	45.07	0.	-25.23	42.95	5.160	-140.	0	59		
28212 FCMCDS	DISTILL	4.	1.00	0.065	0.07	10.7	0.79	0.34	0.97	9.90	0.	0.	12.01	1.442	-9.	-38	0		
28212 FCMCDS	DISTILL	4.	26.82	0.360	0.07	68.2	5.05	2.15	11.05	32.88	0.	-19.80	31.33	3.763	-98.	0	60		
28213 ONOCGN	RESIDUA	55.	0.	0.	11.73	1.2	0.09	0.04	0.16	0.54	16.72	0.	17.56	1.000	0.	0	0		
28213 STM141	RESIDUA	55.	0.01	0.006	11.73	1.9	0.14	0.06	0.23	0.60	16.57	0.	17.60	1.003	-0.	0	999		
28213 STM141	COAL-FG	55.	0.01	0.006	11.73	3.2	0.25	0.10	0.37	0.35	16.57	0.	17.64	1.005	-1.	1	24		
28213 STM141	COAL-AF	55.	0.01	0.006	11.73	3.0	0.23	0.10	0.32	0.35	16.57	0.	17.57	1.001	-1.	4	15		
28213 STM088	RESIDUA	55.	0.00	0.003	11.73	1.6	0.12	0.05	0.22	0.57	16.64	0.	17.60	1.003	-0.	0	127		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC		ELEC					WORTH	%	PAY				
		MW											15%		BACK				
28213 STM088 COAL-FG	55.	0.00	0.003	11.73	2.9	0.22	0.09	0.36	0.33	16.64	0.	17.65	1.005	-1.	0	30			
28213 STM088 COAL-AF	55.	0.00	0.003	11.73	2.8	0.21	0.09	0.32	0.33	16.64	0.	17.60	1.002	-1.	3	19			
28213 PFBSTM COAL-PF	55.	0.02	0.011	11.73	4.6	0.35	0.15	0.40	0.39	16.40	0.	17.69	1.007	-2.	1	23			
28213 TISTMT RESIDUA	55.	0.03	0.017	11.73	8.4	0.63	0.27	0.41	0.72	16.26	0.	18.29	1.042	-6.	0	116			
28213 TISTMT COAL	55.	0.03	0.017	11.73	10.7	0.81	0.34	0.57	0.42	16.26	0.	18.41	1.048	-7.	0	891			
28213 TIHRSG RESIDUA	55.	0.02	0.007	11.73	8.2	0.61	0.26	0.33	0.75	16.40	0.	18.34	1.045	-6.	0	86			
28213 TIHRSG COAL	55.	0.02	0.007	11.73	10.6	0.80	0.34	0.49	0.43	16.40	0.	18.47	1.052	-7.	0	149			
28213 STIRL DISTILL	55.	0.04	0.016	11.73	2.0	0.15	0.06	0.21	1.13	16.06	0.	17.62	1.004	-1.	0	999			
28213 STIRL RESIDUA	55.	0.04	0.016	11.73	2.0	0.15	0.06	0.21	0.92	16.06	0.	17.41	0.992	0.	16	6			
28213 STIRL COAL	55.	0.04	0.016	11.73	3.9	0.29	0.12	0.36	0.54	16.06	0.	17.37	0.990	-1.	10	9			
28213 HEGT00 COAL-AF	55.	0.11	0.006	11.73	17.8	1.35	0.57	0.73	1.32	14.90	0.	18.87	1.075	-12.	0	999			
28213 HEGT00 COAL-AF	55.	0.03	0.006	11.73	7.7	0.59	0.25	0.38	0.57	16.19	0.	17.97	1.024	-4.	0	999			
28213 FCMCCL COAL	55.	0.05	0.028	11.73	8.9	0.69	0.29	0.49	0.57	15.81	0.	17.85	1.017	-5.	1	23			
28213 FCSTCL COAL	55.	0.07	0.037	11.73	9.9	0.77	0.33	0.60	0.62	15.56	0.	17.88	1.018	-5.	1	22			
28213 IGGTST COAL	55.	0.05	0.018	11.73	8.8	0.69	0.29	0.54	0.58	15.95	0.	18.05	1.028	-5.	0	999			
28213 GTSOAR RESIDUA	55.	0.06	0.025	11.73	3.3	0.24	0.10	0.23	1.16	15.68	0.	17.42	0.992	-1.	10	9			
28213 GTAC08 RESIDUA	55.	0.04	0.023	11.73	2.4	0.18	0.07	0.19	0.89	15.98	0.	17.32	0.986	0.	18	6			
28213 GTAC12 RESIDUA	55.	0.06	0.028	11.73	2.6	0.20	0.08	0.21	0.99	15.78	0.	17.26	0.983	0.	17	6			
28213 GTAC16 RESIDUA	55.	0.06	0.032	11.73	3.0	0.22	0.09	0.22	1.08	15.64	0.	17.26	0.983	0.	16	6			
28213 GTWC16 RESIDUA	55.	0.07	0.030	11.73	3.3	0.24	0.10	0.23	1.13	15.62	0.	17.33	0.987	-0.	12	7			
28213 CC1626 RESIDUA	55.	0.09	0.039	11.73	4.0	0.30	0.13	0.34	1.37	15.23	0.	17.36	0.989	-1.	10	9			
28213 CC1622 RESIDUA	55.	0.08	0.037	11.73	3.5	0.26	0.11	0.32	1.25	15.39	0.	17.33	0.987	-0.	11	8			
28213 CC1222 RESIDUA	55.	0.08	0.037	11.73	3.3	0.25	0.11	0.31	1.24	15.40	0.	17.31	0.986	-0.	12	7			
28213 CC0822 RESIDUA	55.	0.06	0.031	11.73	3.0	0.23	0.10	0.29	1.05	15.69	0.	17.36	0.989	-0.	12	8			
28213 DEADV3 RESIDUA	55.	0.19	0.056	11.73	8.4	0.62	0.26	0.45	2.70	13.62	0.	17.65	1.005	-4.	4	16			
28213 DEHTPM RESIDUA	55.	0.06	0.026	11.73	4.8	0.36	0.15	0.32	1.07	15.75	0.	17.66	1.006	-2.	2	20			
28213 DESOA3 DISTILL	55.	0.23	0.056	11.73	10.9	0.81	0.34	0.53	4.14	12.95	0.	18.76	1.069	-8.	0	79			
28213 DESOA3 RESIDUA	55.	0.23	0.056	11.73	10.9	0.81	0.34	0.53	3.37	12.95	0.	18.00	1.025	-6.	0	28			
28213 GTSOAR DISTILL	55.	0.05	0.026	11.73	2.5	0.18	0.08	0.20	1.24	15.81	0.	17.51	0.998	-0.	7	10			
28213 GTRA08 DISTILL	55.	0.10	0.041	11.73	4.6	0.34	0.14	0.28	1.90	15.01	0.	17.67	1.006	-2.	2	22			
28213 GTRA12 DISTILL	55.	0.10	0.041	11.73	4.3	0.32	0.14	0.27	1.80	15.10	0.	17.62	1.004	-2.	3	17			
28213 GTRA16 DISTILL	55.	0.09	0.038	11.73	4.3	0.32	0.14	0.27	1.69	15.24	0.	17.65	1.005	-2.	2	20			
28213 GTR208 DISTILL	55.	0.07	0.031	11.73	3.4	0.25	0.11	0.24	1.48	15.53	0.	17.60	1.003	-1.	3	17			
28213 GTR212 DISTILL	55.	0.08	0.033	11.73	3.7	0.27	0.12	0.24	1.54	15.44	0.	17.61	1.003	-1.	3	18			
28213 GTR216 DISTILL	55.	0.08	0.035	11.73	3.8	0.28	0.12	0.25	1.55	15.40	0.	17.60	1.003	-1.	3	17			
28213 GTRW08 DISTILL	55.	0.12	0.041	11.73	5.1	0.38	0.16	0.30	2.27	14.71	0.	17.82	1.015	-3.	0	999			
28213 GTRW12 DISTILL	55.	0.12	0.045	11.73	5.1	0.38	0.16	0.30	2.17	14.73	0.	17.73	1.010	-2.	0	28			
28213 GTRW16 DISTILL	55.	0.11	0.042	11.73	5.0	0.37	0.16	0.29	2.00	14.92	0.	17.74	1.010	-2.	0	29			
28213 GTR308 DISTILL	55.	0.09	0.028	11.73	4.0	0.29	0.12	0.26	1.93	15.21	0.	17.82	1.015	-2.	0	135			
28213 GTR312 DISTILL	55.	0.09	0.037	11.73	4.1	0.30	0.13	0.26	1.76	15.20	0.	17.65	1.006	-2.	2	22			
28213 GTR316 DISTILL	55.	0.09	0.036	11.73	4.2	0.31	0.13	0.26	1.74	15.23	0.	17.69	1.007	-2.	0	26			
28213 FCPADS DISTILL	55.	0.19	0.060	11.73	7.0	0.52	0.22	1.20	3.32	13.54	0.	18.79	1.070	-7.	0	69			
28213 FCMCDS DISTILL	55.	0.15	0.064	11.73	5.9	0.44	0.19	0.91	2.42	14.20	0.	18.16	1.034	-4.	0	114			
28221 ONOCGN COAL-AF	8.	0.	0.	0.73	4.2	0.32	0.14	0.43	0.69	2.28	0.	3.85	1.000	0.	0	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	REQD	/HEAT	COST	RATIO	*10**6	+ INSNC	ELEC			WORTH	%	PAY				
		MW											15%		BACK				
28221 STM141 RESIDUA	8.	0.28	0.117	0.73	3.4	0.26	0.11	0.32	1.43	1.63	0.	3.76	0.976	1.	999	0			
28221 STM141 COAL-FG	8.	0.28	0.117	0.73	6.1	0.47	0.20	0.54	0.83	1.63	0.	3.67	0.953	-0.	11	8			
28221 STM141 COAL-AF	8.	0.28	0.117	0.73	5.3	0.40	0.17	0.48	0.83	1.63	0.	3.51	0.912	1.	23	5			
28221 STM068 RESIDUA	8.	0.21	0.085	0.73	2.9	0.22	0.10	0.31	1.36	1.81	0.	3.80	0.986	1.	-1	0			
28221 STM068 COAL-FG	8.	0.21	0.085	0.73	5.6	0.43	0.18	0.52	0.79	1.81	0.	3.73	0.967	-0.	11	8			
28221 STM088 COAL-AF	8.	0.21	0.085	0.73	5.0	0.38	0.16	0.46	0.79	1.81	0.	3.60	0.934	0.	24	4			
28221 PFBSTM COAL-PF	8.	0.46	0.186	0.73	8.1	0.61	0.26	0.63	0.93	1.23	0.	3.66	0.950	-1.	9	10			
28221 TISTMT RESIDUA	8.	0.62	0.249	0.73	16.0	1.22	0.52	0.66	1.73	0.88	0.	5.00	1.298	-9.	0	125			
28221 TISTMT COAL	8.	0.62	0.249	0.73	20.4	1.55	0.66	0.92	1.00	0.88	0.	5.01	1.302	-11.	0	999			
28221 TIHRSG RESIDUA	8.	0.29	0.093	0.73	13.8	1.03	0.44	0.51	1.54	1.61	0.	5.12	1.329	-8.	0	71			
28221 TIHRSG COAL	8.	0.29	0.093	0.73	17.9	1.36	0.58	0.75	0.89	1.61	0.	5.18	1.346	-11.	0	126			
28221 STIRL DISTILL	8.	0.75	0.222	0.73	4.4	0.33	0.14	0.33	2.62	0.57	0.	3.99	1.035	-0.	0	54			
28221 STIRL RESIDUA	8.	0.75	0.222	0.73	4.4	0.33	0.14	0.33	2.14	0.57	0.	3.50	0.910	1.	161	1			
28221 STIRL COAL	8.	0.75	0.222	0.73	7.6	0.56	0.24	0.57	1.24	0.57	0.	3.18	0.826	1.	17	6			
28221 HEGT85 COAL-AF	8.	1.00	0.126	0.73	24.2	1.84	0.78	1.14	1.77	0.	0.	5.53	1.436	-15.	0	999			
28221 HEGT85 COAL-AF	8.	2.75	0.160	0.73	42.6	3.23	1.37	1.57	3.66	0.	-2.40	7.43	1.930	-30.	0	180			
28221 HEGT60 COAL-AF	8.	1.00	0.148	0.73	21.9	1.66	0.71	1.00	1.72	0.	0.	5.09	1.322	-12.	0	999			
28221 HEGT60 COAL-AF	8.	1.12	0.153	0.73	22.5	1.71	0.73	0.90	1.85	0.	-0.17	5.02	1.303	-12.	0	999			
28221 HEGT00 COAL-AF	8.	0.49	0.077	0.73	12.9	0.98	0.42	0.59	1.18	1.17	0.	4.34	1.126	-6.	0	999			
28221 FCMCCL COAL	8.	0.88	0.309	0.73	15.3	1.19	0.51	0.80	1.23	0.28	0.	4.01	1.042	-6.	4	16			
28221 FCSTCL COAL	8.	1.00	0.366	0.73	17.2	1.33	0.57	1.08	1.29	0.	0.	4.27	1.108	-8.	2	20			
28221 FCSTCL COAL	8.	1.34	0.400	0.73	18.5	1.44	0.61	1.02	1.48	0.	-0.46	4.09	1.063	-8.	3	16			
28221 IGGTST COAL	8.	0.93	0.271	0.73	15.9	1.24	0.53	0.81	1.38	0.16	0.	4.12	1.069	-7.	3	18			
28221 GTSOAR RESIDUA	8.	0.92	0.277	0.73	5.4	0.40	0.17	0.32	2.33	0.19	0.	3.41	0.884	1.	29	4			
28221 GTAC08 RESIDUA	8.	0.72	0.252	0.73	4.1	0.30	0.13	0.28	1.96	0.84	0.	3.31	0.860	2.	999	0			
28221 GTAC12 RESIDUA	8.	0.90	0.311	0.73	4.6	0.34	0.14	0.30	2.16	0.24	0.	3.18	0.827	2.	122	1			
28221 GTAC16 RESIDUA	8.	1.00	0.342	0.73	5.2	0.39	0.16	0.36	2.29	0.	0.	3.21	0.833	2.	42	3			
28221 GTAC16 RESIDUA	8.	1.01	0.343	0.73	5.2	0.38	0.16	0.32	2.31	0.	-0.02	3.15	0.819	2.	48	2			
28221 GTWC16 RESIDUA	8.	1.00	0.309	0.73	5.7	0.42	0.18	0.40	2.41	0.	0.	3.41	0.885	1.	24	4			
28221 GTWC16 RESIDUA	8.	1.07	0.315	0.73	5.6	0.42	0.18	0.33	2.49	0.	-0.09	3.33	0.864	1.	28	4			
28221 CC1626 RESIDUA	8.	1.00	0.305	0.73	6.3	0.43	0.20	0.55	2.42	0.	0.	3.65	0.949	-0.	11	8			
28221 CC1626 RESIDUA	8.	1.68	0.354	0.73	7.6	0.58	0.25	0.50	3.26	0.	-0.94	3.65	0.947	-1.	9	9			
28221 CC1622 RESIDUA	8.	1.00	0.320	0.73	6.0	0.46	0.19	0.53	2.37	0.	0.	3.55	0.922	0.	15	6			
28221 CC1622 RESIDUA	8.	1.52	0.362	0.73	6.9	0.52	0.22	0.47	2.98	0.	-0.71	3.48	0.905	-0.	14	7			
28221 CC1222 RESIDUA	8.	1.00	0.323	0.73	5.8	0.44	0.19	0.53	2.36	0.	0.	3.51	0.912	0.	18	6			
28221 CC1222 RESIDUA	8.	1.51	0.365	0.73	6.5	0.50	0.21	0.46	2.95	0.	-0.70	3.43	0.890	0.	16	6			
28221 CC0822 RESIDUA	8.	1.00	0.346	0.73	5.8	0.44	0.19	0.51	2.28	0.	0.	3.41	0.885	1.	21	5			
28221 CC0822 RESIDUA	8.	1.20	0.367	0.73	5.9	0.44	0.19	0.43	2.50	0.	-0.27	3.29	0.853	1.	24	4			
28221 STIG15 RESIDUA	8.	1.00	0.114	0.73	6.7	0.50	0.21	0.57	3.08	0.	0.	4.36	1.133	-3.	0	63			
28221 STIG15 RESIDUA	8.	40.08	0.171	0.73	90.2	6.68	2.84	5.31	77.38	0.	-53.48	38.72	10.055	-150.	0	59			
28221 STIG10 RESIDUA	8.	1.00	0.164	0.73	6.2	0.46	0.20	0.53	2.91	0.	0.	4.10	1.064	-2.	0	78			
28221 STIG10 RESIDUA	8.	3.71	0.218	0.73	11.7	0.87	0.37	0.73	7.59	0.	-3.70	5.86	1.521	-10.	0	61			
28221 STIG1S RESIDUA	8.	1.00	0.186	0.73	5.9	0.44	0.19	0.52	2.83	0.	0.	3.98	1.033	-1.	0	999			
28221 STIG1S RESIDUA	8.	2.17	0.228	0.73	8.0	0.60	0.25	0.54	4.77	0.	-1.61	4.55	1.182	-4.	0	64			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK										
28221 DEADV3 RESIDUA	8.	1.00	0.236	0.73	8.4	0.62	0.26	0.57	2.66	0.	0.	4.11	1.067	-3.	0	999			
28221 DEADV3 RESIDUA	8.	2.34	0.293	0.73	12.4	0.92	0.39	0.60	4.64	0.	-1.83	4.72	1.225	-6.	0	91			
28221 DEHTPM RESIDUA	8.	1.00	0.351	0.73	7.8	0.58	0.25	0.53	2.26	0.	0.	3.61	0.938	-1.	10	9			
28221 DEHTPM RESIDUA	8.	1.07	0.359	0.73	7.8	0.58	0.25	0.46	2.34	0.	-0.10	3.52	0.915	-1.	11	8			
28221 DESQA3 DISTILL	8.	1.00	0.201	0.73	8.3	0.61	0.26	0.57	3.41	0.	0.	4.86	1.261	-5.	0	61			
28221 DESQA3 DISTILL	8.	2.70	0.256	0.73	17.4	1.29	0.55	0.75	6.74	0.	-2.33	7.00	1.819	-16.	0	61			
28221 DESQA3 RESIDUA	8.	1.00	0.201	0.73	8.3	0.61	0.26	0.57	2.78	0.	0.	4.23	1.098	-3.	0	147			
28221 DESQA3 RESIDUA	8.	2.70	0.256	0.73	17.4	1.29	0.55	0.75	5.50	0.	-2.33	5.76	1.496	-12.	0	70			
28221 GTSQAD DISTILL	8.	0.86	0.265	0.73	4.2	0.31	0.13	0.29	2.66	0.32	0.	3.71	0.964	1.	999	0			
28221 GTRA08 DISTILL	8.	1.00	0.310	0.73	6.5	0.48	0.20	0.46	2.94	0.	0.	4.09	1.061	-2.	0	87			
28221 GTRA08 DISTILL	8.	1.40	0.344	0.73	7.1	0.53	0.22	0.38	3.55	0.	-0.55	4.13	1.073	-2.	0	89			
28221 GTRA12 DISTILL	8.	1.00	0.317	0.73	6.4	0.48	0.20	0.45	2.91	0.	0.	4.05	1.051	-2.	0	125			
28221 GTRA12 DISTILL	8.	1.38	0.350	0.73	7.0	0.52	0.22	0.38	3.47	0.	-0.51	4.07	1.058	-2.	0	188			
28221 GTRA16 DISTILL	8.	1.00	0.319	0.73	6.7	0.49	0.21	0.45	2.91	0.	0.	4.07	1.056	-2.	0	135			
28221 GTRA16 DISTILL	8.	1.29	0.345	0.73	7.1	0.53	0.22	0.38	3.33	0.	-0.39	4.06	1.055	-2.	0	999			
28221 GTR208 DISTILL	8.	1.00	0.317	0.73	5.7	0.42	0.18	0.40	2.91	0.	0.	3.92	1.018	-1.	0	999			
28221 GTR208 DISTILL	8.	1.07	0.325	0.73	5.7	0.42	0.18	0.33	3.02	0.	-0.10	3.85	1.000	-1.	5	13			
28221 GTR212 DISTILL	8.	1.00	0.316	0.73	6.0	0.45	0.19	0.43	2.92	0.	0.	3.98	1.034	-1.	0	999			
28221 GTR212 DISTILL	8.	1.15	0.330	0.73	6.1	0.45	0.19	0.35	3.14	0.	-0.20	3.93	1.020	-1.	0	27			
28221 GTR216 DISTILL	8.	1.00	0.322	0.73	6.2	0.46	0.20	0.43	2.89	0.	0.	3.98	1.035	-1.	0	999			
28221 GTR216 DISTILL	8.	1.18	0.340	0.73	6.4	0.47	0.20	0.36	3.15	0.	-0.24	3.93	1.022	-1.	0	26			
28221 GTRW08 DISTILL	8.	1.00	0.261	0.73	6.7	0.50	0.21	0.48	3.16	0.	0.	4.34	1.127	-3.	0	63			
28221 GTRW08 DISTILL	8.	1.68	0.302	0.73	8.0	0.59	0.25	0.42	4.31	0.	-0.93	4.65	1.208	-4.	0	61			
28221 GTRW12 DISTILL	8.	1.00	0.278	0.73	6.7	0.50	0.21	0.48	3.08	0.	0.	4.26	1.107	-2.	0	65			
28221 GTRW12 DISTILL	8.	1.71	0.324	0.73	8.1	0.60	0.25	0.42	4.24	0.	-0.98	4.54	1.180	-4.	0	63			
28221 GTRW16 DISTILL	8.	1.00	0.282	0.73	6.9	0.51	0.22	0.48	3.07	0.	0.	4.27	1.109	-3.	0	66			
28221 GTRW16 DISTILL	8.	1.59	0.323	0.73	8.1	0.60	0.25	0.42	4.02	0.	-0.81	4.48	1.163	-4.	0	64			
28221 GTR308 DISTILL	8.	1.00	0.244	0.73	6.1	0.45	0.19	0.45	3.23	0.	0.	4.32	1.121	-2.	0	60			
28221 GTR308 DISTILL	8.	1.28	0.263	0.73	6.4	0.47	0.20	0.37	3.73	0.	-0.39	4.38	1.139	-3.	0	59			
28221 GTR312 DISTILL	8.	1.00	0.286	0.73	6.2	0.46	0.20	0.45	3.05	0.	0.	4.16	1.080	-2.	0	66			
28221 GTR312 DISTILL	8.	1.40	0.316	0.73	6.8	0.50	0.21	0.38	3.68	0.	-0.54	4.23	1.098	-2.	0	65			
28221 GTR316 DISTILL	8.	1.00	0.284	0.73	6.5	0.48	0.20	0.46	3.05	0.	0.	4.20	1.090	-2.	0	66			
28221 GTR316 DISTILL	8.	1.37	0.313	0.73	7.0	0.52	0.22	0.38	3.66	0.	-0.51	4.27	1.108	-3.	0	65			
28221 FCPADS DISTILL	8.	1.00	0.215	0.73	6.7	0.49	0.21	1.06	3.35	0.	0.	5.12	1.329	-5.	0	60			
28221 FCPADS DISTILL	8.	3.06	0.279	0.73	14.5	1.08	0.46	2.51	7.25	0.	-2.82	8.48	2.202	-20.	0	60			
28221 FCMCDS DISTILL	8.	1.00	0.288	0.73	6.9	0.51	0.22	1.01	3.04	0.	0.	4.78	1.242	-4.	0	62			
28221 FCMCDS DISTILL	8.	2.42	0.360	0.73	12.4	0.92	0.39	1.90	5.29	0.	-1.94	6.55	1.701	-12.	0	62			
28241 ONOCGN RESIDUA	32.	0.	0.	3.64	1.8	0.13	0.06	0.21	1.01	9.73	0.	11.14	1.000	0.	0	0			
28241 STM141 RESIDUA	32.	0.04	0.022	3.64	2.9	0.22	0.09	0.30	1.16	9.34	0.	11.11	0.997	-0.	7	11			
28241 STM141 COAL-FG	32.	0.04	0.022	3.64	5.2	0.39	0.17	0.49	0.67	9.34	0.	11.07	0.993	-1.	6	12			
28241 STM141 COAL-AF	32.	0.04	0.022	3.64	4.5	0.34	0.15	0.43	0.67	9.34	0.	10.94	0.982	-1.	10	9			
28241 STM088 RESIDUA	32.	0.03	0.014	3.64	2.4	0.18	0.08	0.28	1.11	9.48	0.	11.14	1.000	-0.	5	13			
28241 STM088 COAL-FG	32.	0.03	0.014	3.64	4.7	0.36	0.15	0.47	0.64	9.48	0.	11.11	0.997	-1.	6	12			
28241 STM088 COAL-AF	32.	0.03	0.014	3.64	4.2	0.32	0.14	0.42	0.64	9.48	0.	11.00	0.988	-1.	9	10			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS			
SYSTEM	FUEL REQD	GEN/ REQD	HEAT COST	+ INSNC			ELEC				WORTH	%	PAY			
	MW		Ratio *10**6								15%		BACK			
28241 PFBSTM	COAL-PF	32.	0.07 0.040	3.64	7.0	0.53	0.22	0.56	0.76	9.01	0.	11.06	0.995	-2.	6	12
28241 TISTMT	RESIDUA	32.	0.10 0.057	3.64	13.6	1.03	0.44	0.58	1.40	8.73	0.	12.19	1.094	-9.	0	487
28241 TISTMT	COAL	32.	0.10 0.057	3.64	17.4	1.32	0.56	0.82	0.82	8.73	0.	12.25	1.099	-11.	0	999
28241 TIHRSG	RESIDUA	32.	0.06 0.023	3.64	12.7	0.94	0.40	0.47	1.36	9.14	0.	12.31	1.105	-9.	0	92
28241 TIHRSG	COAL	32.	0.06 0.023	3.64	16.4	1.24	0.53	0.70	0.79	9.14	0.	12.40	1.113	-11.	0	999
28241 STIRL	DISTILL	32.	0.14 0.054	3.64	3.7	0.27	0.12	0.30	2.17	8.40	0.	11.26	1.011	-1.	0	999
28241 STIRL	RESIDUA	32.	0.14 0.054	3.64	3.7	0.27	0.12	0.30	1.77	8.40	0.	10.86	0.975	-0.	14	7
28241 STIRL	COAL	32.	0.14 0.054	3.64	6.5	0.48	0.21	0.51	1.03	8.40	0.	10.63	0.954	-1.	12	8
28241 HEGT60	COAL-AF	32.	0.28 0.033	3.64	23.8	1.81	0.77	0.95	2.00	6.96	0.	12.49	1.121	-15.	0	999
28241 HEGT00	COAL-AF	32.	0.10 0.019	3.64	11.9	0.90	0.38	0.55	1.04	8.75	0.	11.62	1.043	-6.	0	28
28241 FCMCCL	COAL	32.	0.18 0.085	3.64	13.8	1.07	0.46	0.73	1.06	8.01	0.	11.32	1.016	-7.	4	16
28241 FCMCCL	COAL	32.	0.24 0.120	3.64	15.9	1.23	0.52	0.89	1.21	7.39	0.	11.24	1.009	-7.	4	14
28241 IGGTST	COAL	32.	0.16 0.063	3.64	13.7	1.07	0.45	0.73	1.12	8.15	0.	11.52	1.034	-7.	2	20
28241 GTSMAR	RESIDUA	32.	0.19 0.076	3.64	5.0	0.37	0.16	0.31	2.10	7.85	0.	10.78	0.968	-0.	12	7
28241 GTAC08	RESIDUA	32.	0.14 0.070	3.64	3.8	0.28	0.12	0.26	1.67	8.33	0.	10.66	0.957	1.	20	5
28241 GTAC12	RESIDUA	32.	0.18 0.086	3.64	4.2	0.31	0.13	0.28	1.86	7.97	0.	10.56	0.947	1.	20	5
28241 GTAC16	RESIDUA	32.	0.21 0.095	3.64	4.7	0.35	0.15	0.30	2.01	7.71	0.	10.53	0.945	1.	18	6
28241 GTWC16	RESIDUA	32.	0.21 0.091	3.64	5.1	0.38	0.16	0.31	2.13	7.65	0.	10.63	0.954	0.	15	7
28241 CC1626	RESIDUA	32.	0.31 0.126	3.64	6.4	0.49	0.21	0.45	2.65	6.75	0.	10.54	0.946	-0.	13	7
28241 CC1622	RESIDUA	32.	0.27 0.119	3.64	5.7	0.44	0.19	0.42	2.42	7.06	0.	10.52	0.944	0.	15	7
28241 CC1222	RESIDUA	32.	0.27 0.119	3.64	5.4	0.41	0.18	0.42	2.40	7.08	0.	10.48	0.941	0.	16	6
28241 CC0822	RESIDUA	32.	0.21 0.100	3.64	4.9	0.37	0.16	0.39	2.03	7.65	0.	10.59	0.951	0.	16	6
28241 STIG15	RESIDUA	32.	1.00 0.157	3.64	14.8	1.10	0.47	1.08	9.12	0.	11.77	1.056	-8.	0	29	
28241 STIG15	RESIDUA	32.	8.05 0.171	3.64	76.8	5.69	2.42	4.60	66.32	0.	-41.18	37.85	3.397	-119.	0	59
28241 STIG10	RESIDUA	32.	0.74 0.167	3.64	10.5	0.78	0.33	0.66	6.51	2.48	0.	10.76	0.966	-3.	8	10
28241 STIG15	RESIDUA	32.	0.44 0.112	3.64	7.2	0.53	0.23	0.49	4.09	5.48	0.	10.82	0.971	-2.	9	9
28241 DEADV3	RESIDUA	32.	0.54 0.161	3.64	12.3	0.91	0.39	0.60	4.58	4.46	0.	10.93	0.981	-4.	6	11
28241 DEHTPM	RESIDUA	32.	0.20 0.088	3.64	7.2	0.53	0.23	0.43	2.02	7.79	0.	10.99	0.986	-2.	7	11
28241 DESO3	DISTILL	32.	0.64 0.160	3.64	17.7	1.31	0.56	0.76	6.86	3.47	0.	12.95	1.162	-13.	0	87
28241 DESO3	RESIDUA	32.	0.64 0.160	3.64	17.7	1.31	0.56	0.76	5.60	3.47	0.	11.69	1.049	-9.	1	22
28241 GTSO3	DISTILL	32.	0.18 0.078	3.64	3.9	0.29	0.12	0.27	2.31	8.02	0.	11.02	0.989	-1.	9	9
28241 GTRA08	DISTILL	32.	0.31 0.123	3.64	6.8	0.50	0.21	0.37	3.32	6.73	0.	11.14	1.000	-2.	5	13
28241 GTRA12	DISTILL	32.	0.30 0.122	3.64	6.7	0.49	0.21	0.36	3.19	6.84	0.	11.10	0.996	-2.	6	12
28241 GTRA16	DISTILL	32.	0.27 0.114	3.64	6.7	0.50	0.21	0.36	3.03	7.06	0.	11.15	1.001	-2.	5	14
28241 GTR208	DISTILL	32.	0.22 0.094	3.64	5.3	0.39	0.17	0.32	2.70	7.55	0.	11.12	0.998	-2.	5	13
28241 GTR212	DISTILL	32.	0.24 0.100	3.64	5.7	0.42	0.18	0.33	2.80	7.39	0.	11.12	0.998	-2.	5	13
28241 GTR216	DISTILL	32.	0.25 0.105	3.64	5.9	0.44	0.19	0.34	2.82	7.33	0.	11.11	0.997	-2.	5	13
28241 GTRW08	DISTILL	32.	0.37 0.123	3.64	7.6	0.57	0.24	0.41	4.00	6.18	0.	11.39	1.022	-4.	0	26
28241 GTRW12	DISTILL	32.	0.37 0.134	3.64	7.6	0.57	0.24	0.40	3.88	6.16	0.	11.25	1.009	-3.	3	17
28241 GTRW16	DISTILL	32.	0.34 0.125	3.64	7.6	0.56	0.24	0.40	3.62	6.46	0.	11.27	1.012	-3.	3	18
28241 GTR308	DISTILL	32.	0.28 0.086	3.64	6.1	0.45	0.19	0.35	3.44	7.03	0.	11.47	1.029	-3.	0	999
28241 GTR312	DISTILL	32.	0.29 0.111	3.64	6.3	0.46	0.20	0.36	3.24	6.93	0.	11.18	1.004	-2.	4	15
28241 GTR316	DISTILL	32.	0.28 0.108	3.64	6.5	0.48	0.20	0.36	3.22	6.97	0.	11.24	1.008	-2.	3	17
28241 FCPADS	DISTILL	32.	0.61 0.182	3.64	12.4	0.92	0.39	2.16	6.22	3.75	0.	13.44	1.206	-12.	0	69

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST						PERCENT OF ORIGINAL COST 100 *****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****											
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	+ INSNC	ELEC							WORTH 15%	%	PAY BACK		
28241 FCMCDS	DISTILL	32.	0.49	0.192	3.64	10.7	0.80	0.34	1.64	4.54	5.00	0.	12.31	1.105	-8.	0	108
28242 ONCCGN	RESIDUA	11.	0.	0.	1.63	1.5	0.11	0.05	0.19	0.86	3.71	0.	4.92	1.000	0.	0	0
28242 STM141	RESIDUA	11.	0.17	0.085	1.63	2.9	0.22	0.09	0.29	1.10	3.09	0.	4.78	0.972	-0.	12	8
28242 STM141	COAL-FG	11.	0.17	0.085	1.63	4.9	0.37	0.16	0.47	0.64	3.09	0.	4.72	0.960	-1.	9	9
28242 STM141	COAL-AF	11.	0.17	0.085	1.63	4.4	0.33	0.14	0.41	0.64	3.09	0.	4.61	0.938	-0.	12	8
28242 STM088	RESIDUA	11.	0.13	0.056	1.63	2.4	0.19	0.08	0.27	1.05	3.23	0.	4.81	0.977	-0.	12	8
28242 STM088	COAL-FG	11.	0.13	0.066	1.63	4.5	0.34	0.14	0.45	0.61	3.23	0.	4.76	0.968	-1.	8	10
28242 STM088	COAL-AF	11.	0.13	0.066	1.63	4.1	0.31	0.13	0.40	0.61	3.23	0.	4.68	0.951	-1.	11	8
28242 PFBSTM	COAL-PF	11.	0.25	0.125	1.63	6.5	0.50	0.21	0.53	0.71	2.78	0.	4.73	0.961	-2.	8	10
28242 TISTMT	RESIDUA	11.	0.32	0.162	1.63	12.4	0.94	0.40	0.54	1.33	2.51	0.	5.72	1.162	-8.	0	999
28242 TISTMT	COAL	11.	0.32	0.162	1.63	15.8	1.29	0.51	0.76	0.77	2.51	0.	5.74	1.167	-9.	0	999
28242 TIHRSG	RESIDUA	11.	0.13	0.055	1.63	10.0	0.74	0.31	0.39	1.09	3.23	0.	5.77	1.172	-7.	0	108
28242 TIHRSG	COAL	11.	0.13	0.055	1.63	12.9	0.98	0.42	0.58	0.63	3.23	0.	5.84	1.187	-8.	0	999
28242 STIRL	DISTILL	11.	0.36	0.135	1.63	3.1	0.23	0.10	0.27	1.97	2.36	0.	4.92	1.000	-1.	5	13
28242 STIRL	RESIDUA	11.	0.36	0.135	1.63	3.1	0.23	0.10	0.27	1.60	2.36	0.	4.56	0.926	0.	19	5
28242 STIRL	COAL	11.	0.36	0.135	1.63	5.6	0.41	0.18	0.46	0.93	2.36	0.	4.34	0.862	-0.	14	7
28242 HEGT85	COAL-AF	11.	0.81	0.190	1.63	23.4	1.78	0.76	0.90	1.75	0.72	0.	5.90	1.200	-14.	0	27
28242 HEGT60	COAL-AF	11.	0.43	0.104	1.63	15.2	1.15	0.49	0.64	1.17	2.10	0.	5.54	1.126	-9.	0	27
28242 HEGT60	COAL-AF	11.	0.21	0.047	1.63	9.4	0.71	0.30	0.45	0.83	2.93	0.	5.23	1.063	-5.	1	24
28242 FCMCCL	COAL	11.	0.39	0.171	1.63	11.4	0.89	0.38	0.62	0.90	2.26	0.	5.04	1.024	-5.	4	15
28242 FCSTCL	COAL	11.	0.67	0.301	1.63	14.5	1.13	0.48	0.33	1.14	1.24	0.	4.82	0.979	-6.	5	13
28242 IGGTST	COAL	11.	0.47	0.174	1.63	12.6	0.98	0.42	0.69	1.06	1.95	0.	5.11	1.038	-6.	4	16
28242 GTSOAR	RESIDUA	11.	0.40	0.154	1.63	3.9	0.29	0.12	0.26	1.63	2.24	0.	4.55	0.924	0.	15	6
28242 GTAC08	RESIDUA	11.	0.32	0.139	1.63	3.0	0.23	0.10	0.23	1.44	2.51	0.	4.49	0.914	1.	21	5
28242 GTAC12	RESIDUA	11.	0.40	0.172	1.63	3.4	0.25	0.11	0.24	1.56	2.23	0.	4.39	0.892	1.	22	5
28242 GTAC16	RESIDUA	11.	0.44	0.191	1.63	3.7	0.28	0.12	0.25	1.65	2.06	0.	4.35	0.885	1.	20	5
28242 GTWC16	RESIDUA	11.	0.48	0.181	1.63	4.2	0.31	0.13	0.27	1.82	1.94	0.	4.46	0.908	0.	16	6
28242 CC1626	RESIDUA	11.	0.83	0.316	1.63	6.0	0.46	0.19	0.43	2.51	0.63	0.	4.22	0.857	0.	15	7
28242 CC1622	RESIDUA	11.	0.75	0.298	1.63	5.3	0.41	0.17	0.40	2.28	0.94	0.	4.20	0.854	0.	16	6
28242 CC1222	RESIDUA	11.	0.75	0.300	1.63	5.1	0.39	0.17	0.40	2.27	0.94	0.	4.16	0.846	1.	17	6
28242 CC0822	RESIDUA	11.	0.60	0.259	1.63	4.7	0.35	0.15	0.37	1.92	1.48	0.	4.27	0.869	0.	17	6
28242 STIG15	RESIDUA	11.	1.00	0.141	1.63	7.6	0.56	0.24	0.64	3.95	0.	0.	5.39	1.097	-4.	0	999
28242 STIG15	RESIDUA	11.	17.96	0.171	1.63	59.2	4.38	1.86	3.79	56.38	0.	-37.74	28.68	5.830	-102.	0	59
28242 STIG10	RESIDUA	11.	1.00	0.201	1.63	6.8	0.51	0.22	0.55	3.67	0.	0.	4.95	1.006	-3.	4	14
28242 STIG10	RESIDUA	11.	1.66	0.218	1.63	8.6	0.64	0.27	0.57	5.53	0.	-1.47	5.55	1.128	-5.	0	***
28242 STIG1S	RESIDUA	11.	0.97	0.223	1.63	6.0	0.44	0.19	0.43	3.48	0.09	0.	4.63	0.941	-1.	10	9
28242 DEADV3	RESIDUA	11.	0.93	0.292	1.63	8.4	0.62	0.26	0.45	3.01	0.25	0.	4.59	0.934	-2.	8	10
28242 DEHTPH	RESIDUA	11.	0.50	0.231	1.63	5.9	0.44	0.19	0.37	1.68	1.84	0.	4.52	0.919	-1.	11	8
28242 DESOA3	DISTILL	11.	1.00	0.270	1.63	9.9	0.73	0.31	0.55	4.12	0.	0.	5.72	1.162	-6.	0	165
28242 DESOA3	DISTILL	11.	1.05	0.273	1.63	10.2	0.75	0.32	0.51	4.28	0.	-0.12	5.74	1.168	-7.	0	148
28242 DESOA3	RESIDUA	11.	1.00	0.270	1.63	9.9	0.73	0.31	0.55	3.36	0.	0.	4.96	1.008	-4.	4	14
28242 DESOA3	RESIDUA	11.	1.05	0.273	1.63	10.2	0.75	0.32	0.51	3.49	0.	-0.12	4.96	1.007	-4.	4	14
28242 GTSOAD	DISTILL	11.	0.38	0.158	1.63	3.1	0.23	0.10	0.24	1.90	2.30	0.	4.77	0.969	-0.	11	8
28242 GTRA08	DISTILL	11.	0.59	0.237	1.63	5.1	0.38	0.16	0.30	2.43	1.51	0.	4.79	0.973	-1.	8	10

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML	PRESNT ROI		GROSS														
SYSTEM	FUEL REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK											
28242 GTRA12 DISTILL	11.	0.59	0.238	1.63	5.0	0.37	0.16	0.30	2.40	1.54	0.	4.76	0.968	-1.	8	10			
28242 GTRA16 DISTILL	11.	0.55	0.225	1.63	5.1	0.38	0.16	0.30	2.32	1.66	0.	4.82	0.980	-1.	7	11			
28242 GTR208 DISTILL	11.	0.46	0.187	1.63	4.1	0.30	0.13	0.27	2.12	1.99	0.	4.81	0.979	-1.	8	10			
28242 GTR212 DISTILL	11.	0.50	0.200	1.63	4.4	0.33	0.14	0.28	2.21	1.86	0.	4.82	0.980	-1.	7	10			
28242 GTR216 DISTILL	11.	0.51	0.208	1.63	4.6	0.34	0.14	0.28	2.21	1.82	0.	4.80	0.977	-1.	8	10			
28242 GTRW08 DISTILL	11.	0.71	0.239	1.63	5.8	0.43	0.18	0.33	2.97	1.07	0.	4.99	1.014	-2.	4	16			
28242 GTRW12 DISTILL	11.	0.73	0.259	1.63	5.9	0.44	0.19	0.33	2.95	0.99	0.	4.90	0.996	-2.	5	13			
28242 GTRW16 DISTILL	11.	0.69	0.245	1.63	5.9	0.44	0.19	0.33	2.82	1.16	0.	4.94	1.003	-2.	5	14			
28242 GTR308 DISTILL	11.	0.54	0.173	1.63	4.6	0.34	0.14	0.29	2.55	1.71	0.	5.03	1.023	-2.	1	23			
28242 GTR312 DISTILL	11.	0.61	0.219	1.63	5.0	0.37	0.16	0.30	2.61	1.45	0.	4.89	0.994	-2.	5	12			
28242 GTR316 DISTILL	11.	0.60	0.215	1.63	5.2	0.38	0.16	0.31	2.60	1.48	0.	4.93	1.003	-2.	4	14			
28242 FCPADS DISTILL	11.	1.00	0.265	1.63	8.0	0.59	0.25	1.47	4.14	0.	0.	6.46	1.313	-8.	0	67			
28242 FCPADS DISTILL	11.	1.37	0.279	1.63	9.7	0.72	0.31	1.82	5.29	0.	-0.82	7.31	1.487	-12.	0	64			
28242 FCMCDS DISTILL	11.	1.00	0.354	1.63	8.1	0.60	0.26	1.36	3.64	0.	0.	5.85	1.190	-6.	0	97			
28242 FCMCDS DISTILL	11.	1.08	0.360	1.63	8.4	0.62	0.27	1.38	3.86	0.	-0.19	5.94	1.208	-7.	0	89			
28651 ONOCGN COAL-FG	4.	0.	0.	0.03	29.1	2.21	0.94	1.73	6.09	1.34	0.	12.30	1.000	0.	0	0			
28651 STM141 RESIDUA	4.	1.00	0.071	0.03	20.1	1.53	0.65	1.17	10.99	0.	0.	14.34	1.165	-2.	-18	0			
28651 STM141 RESIDUA	4.	8.28	0.322	0.03	22.0	1.67	0.71	1.09	14.68	0.	-5.84	12.31	1.001	3.	-5	0			
28651 STM141 COAL-FG	4.	1.00	0.071	0.03	35.6	2.70	1.15	2.31	6.38	0.	0.	12.54	1.019	-4.	1	23			
28651 STM141 COAL-FG	4.	8.28	0.322	0.03	40.1	3.04	1.29	2.29	8.53	0.	-5.84	9.31	0.756	4.	21	5			
28651 STM141 COAL-AF	4.	1.00	0.071	0.03	33.9	2.57	1.09	2.22	6.38	0.	0.	12.27	0.997	-2.	5	13			
28651 STM141 COAL-AF	4.	8.28	0.322	0.03	34.0	2.58	1.10	2.22	8.53	0.	-5.84	8.58	0.697	9.	44	3			
28651 STM088 RESIDUA	4.	1.00	0.071	0.03	19.9	1.51	0.64	1.18	10.99	0.	0.	14.32	1.164	-2.	-18	0			
28651 STM088 RESIDUA	4.	6.27	0.278	0.03	20.0	1.51	0.64	1.03	13.66	0.	-4.23	12.62	1.026	3.	-7	0			
28651 STM088 COAL-FG	4.	1.00	0.071	0.03	35.8	2.72	1.16	2.33	6.38	0.	0.	12.58	1.023	-4.	1	25			
28651 STM088 COAL-FG	4.	6.27	0.278	0.03	37.3	2.83	1.20	2.15	7.93	0.	-4.23	9.89	0.804	4.	22	5			
28651 STM088 COAL-AF	4.	1.00	0.071	0.03	34.0	2.58	1.10	2.25	6.38	0.	0.	12.30	1.000	-2.	5	14			
28651 STM088 COAL-AF	4.	6.27	0.278	0.03	32.7	2.48	1.05	2.15	7.93	0.	-4.23	9.39	0.763	7.	45	3			
28651 PFBSTM COAL-PF	4.	1.00	0.070	0.03	34.4	2.61	1.11	2.28	6.39	0.	0.	12.38	1.007	-3.	3	17			
28651 PFBSTM COAL-PF	4.	12.74	0.381	0.03	47.3	3.59	1.53	3.66	9.93	0.	-9.42	9.28	0.755	1.	15	6			
28651 T1STMT RESIDUA	4.	1.00	0.070	0.03	28.7	2.18	0.93	1.36	11.00	0.	0.	15.46	1.257	-10.	999	0			
28651 T1STMT RESIDUA	4.	10.17	0.348	0.03	87.3	6.62	2.82	3.00	15.77	0.	-7.38	20.85	1.694	-35.	0	70			
28651 T1STMT COAL	4.	1.00	0.070	0.03	43.9	3.33	1.42	2.46	6.39	0.	0.	13.60	1.105	-11.	0	999			
28651 T1STMT COAL	4.	16.73	0.419	0.03	150.8	11.44	4.87	5.16	11.14	0.	-12.63	19.98	1.624	-82.	0	999			
28651 TIHRSG RESIDUA	4.	1.00	0.056	0.03	36.2	2.68	1.14	1.50	11.17	0.	0.	16.48	1.339	-16.	0	57			
28651 TIHRSG RESIDUA	4.	4.40	0.178	0.03	74.2	5.50	2.34	2.51	13.49	0.	-2.73	21.11	1.715	-48.	0	63			
28651 TIHRSG COAL	4.	1.00	0.056	0.03	53.2	4.04	1.72	2.66	6.48	0.	0.	14.90	1.211	-20.	0	102			
28651 TIHRSG COAL	4.	7.24	0.237	0.03	128.6	9.76	4.15	4.36	8.96	0.	-5.01	22.23	1.807	-79.	0	119			
28651 STIRL DISTILL	4.	1.00	0.051	0.03	22.8	1.69	0.72	1.16	13.76	0.	0.	17.33	1.408	-12.	-42	0			
28651 STIRL DISTILL	4.	11.61	0.270	0.03	42.4	3.14	1.33	1.84	23.41	0.	-8.52	21.20	1.723	-34.	0	57			
28651 STIRL RESIDUA	4.	1.00	0.051	0.03	22.8	1.69	0.72	1.16	11.22	0.	0.	14.79	1.202	-4.	-25	0			
28651 STIRL RESIDUA	4.	11.61	0.270	0.03	42.4	3.14	1.34	1.84	19.10	0.	-8.52	16.90	1.373	-20.	0	59			
28651 STIRL COAL	4.	1.00	0.051	0.03	36.7	2.72	1.16	2.23	6.52	0.	0.	12.62	1.026	-4.	0	28			
28651 STIRL COAL	4.	19.11	0.320	0.03	100.6	7.45	3.17	4.04	14.31	0.	-14.54	14.44	1.174	-40.	2	20			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST								PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																	
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST										WORTH	%	PAY	
		MW	REQD	RATIO *10**6	INSNC									15%		BACK	
28651 HEGT85 COAL-AF	4.	1.00	0.025	0.03	40.0	3.04	1.29	2.21	6.70	0.	0.	13.23	1.075	-8.	0	999	
28651 HEGT85 COAL-AF	4.	59.06	0.194	0.03	256.2	19.44	8.27	9.72	42.17	0.	-46.61	32.99	2.681	-174.	0	281	
28651 HEGT60 COAL-AF	4.	1.00	0.028	0.03	39.7	3.01	1.28	2.21	6.68	0.	0.	13.18	1.071	-8.	0	999	
28651 HEGT60 COAL-AF	4.	26.58	0.190	0.03	144.0	10.93	4.65	5.63	21.78	0.	-20.53	22.46	1.825	-87.	0	619	
28651 HEGT00 COAL-AF	4.	1.00	0.029	0.03	39.3	2.98	1.27	2.23	6.67	0.	0.	13.15	1.069	-8.	0	999	
28651 HEGT00 COAL-AF	4.	11.97	0.152	0.03	85.2	6.47	2.75	3.60	13.11	0.	-8.80	17.12	1.391	-42.	0	999	
28651 FCMCCL COAL	4.	1.00	-0.511	0.03	43.2	3.36	1.43	2.38	10.38	0.	0.	17.55	1.426	-24.	0	59	
28651 FCMCCL COAL	4.	21.77	0.224	0.03	104.2	8.10	3.44	5.78	17.94	0.	-16.68	18.59	1.511	-57.	0	999	
28651 FCSTCL COAL	4.	1.00	-0.508	0.03	42.4	3.29	1.40	2.40	10.36	0.	0.	17.45	1.418	-23.	0	59	
28651 FCSTCL COAL	4.	35.18	0.339	0.03	129.9	10.10	4.29	7.23	22.24	0.	-27.44	16.43	1.335	-63.	1	24	
28651 IGGTST COAL	4.	1.00	-0.521	0.03	40.6	3.15	1.34	2.35	10.45	0.	0.	17.29	1.405	-22.	0	59	
28651 IGGTST COAL	4.	24.79	0.187	0.03	101.1	7.86	3.34	3.46	20.73	0.	-19.10	16.31	1.325	-48.	0	999	
28651 GTSOAR RESIDUA	4.	1.00	0.053	0.03	21.3	1.58	0.67	1.09	11.20	0.	0.	14.54	1.182	-3.	-20	0	
28651 GTSOAR RESIDUA	4.	13.70	0.296	0.03	32.0	2.37	1.01	1.51	20.38	0.	-10.19	15.07	1.225	-10.	0	56	
28651 GTAC08 RESIDUA	4.	1.00	0.060	0.03	20.7	1.54	0.65	1.08	11.12	0.	0.	14.38	1.169	-2.	-19	0	
28651 GTAC08 RESIDUA	4.	10.87	0.309	0.03	26.6	1.97	0.84	1.35	17.37	0.	-7.93	13.62	1.107	-3.	-27	0	
28651 GTAC12 RESIDUA	4.	1.00	0.060	0.03	20.7	1.53	0.65	1.07	11.12	0.	0.	14.38	1.168	-2.	-18	0	
28651 GTAC12 RESIDUA	4.	13.50	0.334	0.03	30.4	2.25	0.96	1.46	19.09	0.	-10.03	13.73	1.116	-5.	0	55	
28651 GTAC16 RESIDUA	4.	1.00	0.059	0.03	20.8	1.54	0.66	1.07	11.13	0.	0.	14.40	1.170	-2.	-19	0	
28651 GTAC16 RESIDUA	4.	15.21	0.344	0.03	33.7	2.50	1.06	1.55	20.32	0.	-11.41	14.03	1.140	-7.	0	57	
28651 GTWC16 RESIDUA	4.	1.00	0.053	0.03	21.1	1.56	0.66	1.08	11.20	0.	0.	14.51	1.179	-3.	-20	0	
28651 GTWC16 RESIDUA	4.	16.09	0.315	0.03	33.0	2.45	1.04	1.55	22.04	0.	-12.12	14.95	1.216	-10.	0	56	
28651 CC1626 RESIDUA	4.	1.00	0.053	0.03	20.9	1.58	0.67	1.14	11.20	0.	0.	14.60	1.187	-3.	-21	0	
28651 CC1626 RESIDUA	4.	26.78	0.361	0.03	43.3	3.29	1.40	2.00	29.76	0.	-20.69	15.75	1.280	-18.	0	61	
28651 CC1622 RESIDUA	4.	1.00	0.056	0.03	20.6	1.56	0.67	1.14	11.17	0.	0.	14.54	1.182	-3.	-20	0	
28651 CC1622 RESIDUA	4.	24.12	0.369	0.03	43.3	3.28	1.40	1.96	27.12	0.	-18.56	15.20	1.235	-16.	0	63	
28651 CC1222 RESIDUA	4.	1.00	0.056	0.03	20.5	1.55	0.66	1.13	11.17	0.	0.	14.51	1.179	-3.	-20	0	
28651 CC1222 RESIDUA	4.	24.04	0.373	0.03	41.3	3.13	1.33	1.93	26.91	0.	-18.49	14.81	1.204	-14.	0	63	
28651 CC0822 RESIDUA	4.	1.00	0.060	0.03	20.7	1.57	0.67	1.14	11.12	0.	0.	14.49	1.178	-3.	-20	0	
28651 CC0822 RESIDUA	4.	19.25	0.376	0.03	35.3	2.68	1.14	1.75	22.74	0.	-14.65	13.66	1.110	-7.	0	62	
28651 STIG15 RESIDUA	4.	1.00	0.020	0.03	20.8	1.54	0.65	1.10	11.60	0.	0.	14.89	1.210	-4.	-21	0	
28651 STIG15 RESIDUA	4.	605.18	0.171	0.03	662.2	49.04	20.85	39.42	685.34	0.	-485.02	309.63	25.165	-1231.	0	58	
28651 STIG10 RESIDUA	4.	1.00	0.028	0.03	20.6	1.52	0.65	1.09	11.50	0.	0.	14.75	1.199	-3.	-20	0	
28651 STIG10 RESIDUA	4.	55.96	0.218	0.03	79.0	5.85	2.49	4.22	67.24	0.	-44.12	35.67	2.899	-96.	0	58	
28651 STIG1S RESIDUA	4.	1.00	0.032	0.03	20.5	1.52	0.65	1.09	11.45	0.	0.	14.70	1.195	-3.	-20	0	
28651 STIG1S RESIDUA	4.	32.83	0.228	0.03	50.6	3.74	1.59	2.92	42.26	0.	-25.56	24.97	2.029	-49.	0	57	
28651 DEADV3 RESIDUA	4.	1.00	0.042	0.03	24.7	1.83	0.78	1.19	11.34	0.	0.	15.14	1.231	-6.	-34	0	
28651 DEADV3 RESIDUA	4.	34.13	0.297	0.03	105.4	7.81	3.32	3.56	39.70	0.	-26.60	27.79	2.258	-84.	0	63	
28651 DEHTPM RESIDUA	4.	1.00	0.062	0.03	24.8	1.84	0.78	1.23	11.10	0.	0.	14.95	1.215	-6.	-33	0	
28651 DEHTPM RESIDUA	4.	16.46	0.368	0.03	60.1	4.45	1.89	2.38	20.66	0.	-12.41	16.98	1.380	-29.	0	68	
28651 DESOA3 DISTILL	4.	1.00	0.036	0.03	23.9	1.77	0.75	1.17	13.99	0.	0.	17.68	1.437	-14.	-50	0	
28651 DESOA3 DISTILL	4.	39.14	0.260	0.03	146.5	10.85	4.61	4.63	57.35	0.	-30.62	46.82	3.805	-163.	0	60	
28651 DESOA3 RESIDUA	4.	1.00	0.036	0.03	23.9	1.77	0.75	1.17	11.41	0.	0.	15.10	1.228	-6.	-30	0	
28651 DESOA3 RESIDUA	4.	39.14	0.260	0.03	146.5	10.85	4.61	4.63	46.78	0.	-30.62	36.25	2.946	-130.	0	63	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100								
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																		
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES	GEN/	/HEAT COST														
SYSTEM	FUEL	REQD MW	REQD	RATIO *10**6	INSNC													
28651	GTSOAD	DISTILL	4.	1.00	0.058	0.03	20.5	1.52	0.65	1.07	13.67	0.	0.	16.90	1.374	-10.	-31	0
28651	GTSOAD	DISTILL	4.	12.95	0.315	0.03	27.5	2.03	0.86	1.39	23.45	0.	-9.59	18.15	1.475	-17.	119	0
28651	GTRA08	DISTILL	4.	1.00	0.054	0.03	21.4	1.59	0.67	1.08	13.71	0.	0.	17.05	1.386	-11.	-35	0
28651	GTRA08	DISTILL	4.	20.80	0.347	0.03	43.1	3.20	1.36	1.82	30.82	0.	-15.90	21.30	1.731	-34.	0	57
28651	GTRA12	DISTILL	4.	1.00	0.055	0.03	21.3	1.58	0.67	1.08	13.70	0.	0.	17.03	1.384	-11.	-34	0
28651	GTRA12	DISTILL	4.	20.44	0.352	0.03	41.6	3.08	1.31	1.78	30.20	0.	-15.61	20.76	1.688	-32.	0	57
28651	GTRA16	DISTILL	4.	1.00	0.056	0.03	21.5	1.60	0.68	1.09	13.69	0.	0.	17.05	1.386	-11.	-35	0
28651	GTRA16	DISTILL	4.	19.17	0.348	0.03	41.9	3.10	1.32	1.78	29.05	0.	-14.59	20.67	1.680	-32.	0	57
28651	GTR208	DISTILL	4.	1.00	0.055	0.03	21.1	1.56	0.66	1.08	13.70	0.	0.	17.01	1.382	-11.	-34	0
28651	GTR208	DISTILL	4.	16.00	0.327	0.03	34.2	2.53	1.08	1.58	26.44	0.	-12.04	19.59	1.532	-25.	0	56
28651	GTR212	DISTILL	4.	1.00	0.055	0.03	21.2	1.57	0.67	1.08	13.70	0.	0.	17.03	1.384	-11.	-34	0
28651	GTR212	DISTILL	4.	17.17	0.333	0.03	36.5	2.70	1.15	1.64	27.51	0.	-12.98	20.02	1.527	-27.	0	56
28651	GTR216	DISTILL	4.	1.00	0.056	0.03	21.3	1.58	0.67	1.08	13.69	0.	0.	17.02	1.383	-11.	-34	0
28651	GTR216	DISTILL	4.	17.58	0.342	0.03	38.6	2.86	1.21	1.69	27.59	0.	-13.31	20.04	1.629	-28.	0	57
28651	GTRW08	DISTILL	4.	1.00	0.046	0.03	21.5	1.59	0.68	1.09	13.84	0.	0.	17.19	1.397	-11.	-36	0
28651	GTRW08	DISTILL	4.	24.92	0.305	0.03	43.1	3.19	1.36	1.86	37.56	0.	-19.21	24.76	2.012	-45.	0	57
28651	GTRW12	DISTILL	4.	1.00	0.049	0.03	21.5	1.59	0.68	1.08	13.80	0.	0.	17.15	1.394	-11.	-35	0
28651	GTRW12	DISTILL	4.	25.50	0.326	0.03	43.6	3.23	1.37	1.86	37.06	0.	-19.67	23.85	1.938	-43.	0	57
28651	GTRW16	DISTILL	4.	1.00	0.049	0.03	21.6	1.60	0.68	1.09	13.79	0.	0.	17.16	1.395	-11.	-36	0
28651	GTRW16	DISTILL	4.	23.78	0.325	0.03	43.3	3.21	1.36	1.85	35.22	0.	-18.28	23.36	1.899	-41.	0	57
28651	GTR308	DISTILL	4.	1.00	0.043	0.03	21.2	1.57	0.67	1.08	13.88	0.	0.	17.20	1.398	-11.	-35	0
28651	GTR308	DISTILL	4.	19.01	0.267	0.03	36.5	2.71	1.15	1.67	32.44	0.	-14.46	23.50	1.910	-38.	0	56
28651	GTR312	DISTILL	4.	1.00	0.050	0.03	21.2	1.57	0.67	1.08	13.78	0.	0.	17.10	1.390	-11.	-35	0
28651	GTR312	DISTILL	4.	20.92	0.318	0.03	37.9	2.81	1.19	1.70	32.35	0.	-15.99	22.07	1.793	-34.	0	56
28651	GTR316	DISTILL	4.	1.00	0.049	0.03	21.4	1.59	0.68	1.09	13.79	0.	0.	17.13	1.393	-11.	-35	0
28651	GTR316	DISTILL	4.	20.61	0.315	0.03	38.9	2.88	1.23	1.72	32.15	0.	-15.74	22.24	1.808	-35.	0	56
28651	FCPADS	DISTILL	4.	1.00	0.037	0.03	23.0	1.70	0.72	1.43	13.96	0.	0.	17.82	1.449	-14.	-46	0
28651	FCPADS	DISTILL	4.	46.16	0.279	0.03	124.1	9.19	3.91	21.50	64.24	0.	-36.25	62.59	5.087	-204.	0	59
28651	FCMCDS	DISTILL	4.	1.00	0.050	0.03	23.2	1.72	0.73	1.41	13.78	0.	0.	17.64	1.433	-14.	-46	0
28651	FCMCDS	DISTILL	4.	36.51	0.360	0.03	107.5	7.96	3.38	16.24	46.87	0.	-28.51	45.94	3.734	-144.	0	60
28653	ONGCGN	COAL-FG	6.	0.	0.	0.07	20.5	1.56	0.66	1.27	6.11	1.89	0.	11.50	1.000	0.	0	0
28653	STM141	RESIDUA	6.	1.00	0.096	0.07	12.4	0.94	0.40	0.94	11.25	0.	0.	13.53	1.176	-2.	-19	0
28653	STM141	RESIDUA	6.	2.23	0.179	0.07	12.0	0.91	0.39	0.75	12.13	0.	-1.39	12.78	1.111	0.	-14	0
28653	STM141	COAL-FG	6.	1.00	0.096	0.07	28.0	2.12	0.90	1.92	6.53	0.	0.	11.47	0.997	-4.	5	13
28653	STM141	COAL-FG	6.	2.23	0.179	0.07	25.3	1.92	0.82	1.58	7.04	0.	-1.39	9.97	0.866	2.	23	5
28653	STM141	COAL-AF	6.	1.00	0.096	0.07	24.5	1.86	0.79	1.80	6.53	0.	0.	10.99	0.955	-0.	13	7
28653	STM141	COAL-AF	6.	2.23	0.179	0.07	18.2	1.38	0.59	1.41	7.04	0.	-1.39	9.03	0.785	9.	999	0
28653	STM088	RESIDUA	6.	1.00	0.096	0.07	11.8	0.90	0.38	0.92	11.25	0.	0.	13.45	1.169	-2.	-18	0
28653	STM088	RESIDUA	6.	1.45	0.130	0.07	10.7	0.81	0.34	0.71	11.57	0.	-0.51	12.92	1.123	0.	-14	0
28653	STM088	COAL-FG	6.	1.00	0.096	0.07	27.1	2.06	0.87	1.87	6.53	0.	0.	11.34	0.986	-3.	7	11
28653	STM088	COAL-FG	6.	1.45	0.130	0.07	23.3	1.77	0.75	1.48	6.72	0.	-0.51	10.21	0.888	3.	29	4
28653	STM088	COAL-AF	6.	1.00	0.096	0.07	22.7	1.72	0.73	1.76	6.53	0.	0.	10.75	0.935	1.	24	5
28653	STM088	COAL-AF	6.	1.45	0.130	0.07	17.1	1.30	0.55	1.36	6.72	0.	-0.51	9.42	0.819	8.	999	0
28653	PFBSTM	COAL-PF	6.	1.00	0.093	0.07	28.1	2.13	0.91	1.99	6.55	0.	0.	11.58	1.007	-4.	4	15

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW	REQD										15%		BACK				
28653	PFBSTM	COAL-PF	6.	4.06	0.256	0.07	30.8	2.34	0.99	2.37	7.90	0.	-3.48	10.12	0.879	-1.	13	7	
28653	TISTMT	RESIDUA	6.	1.00	0.094	0.07	26.7	2.03	0.86	1.27	11.27	0.	0.	15.43	1.341	-15.	0	57	
28653	TISTMT	RESIDUA	6.	5.59	0.308	0.07	74.9	5.68	2.42	2.37	14.67	0.	-5.22	19.92	1.732	-52.	0	68	
28653	TISTMT	COAL	6.	1.00	0.094	0.07	42.9	3.26	1.39	2.24	6.54	0.	0.	13.43	1.167	-17.	0	999	
28653	TISTMT	COAL	6.	5.59	0.308	0.07	95.0	7.21	3.07	3.39	8.52	0.	-5.22	16.96	1.475	-53.	0	999	
28653	TIHRSG	RESIDUA	6.	1.00	0.050	0.07	34.1	2.53	1.08	1.39	11.82	0.	0.	16.81	1.462	-23.	0	58	
28653	TIHRSG	RESIDUA	6.	3.45	0.125	0.07	72.8	5.39	2.29	2.19	14.97	0.	-2.78	22.06	1.918	-57.	0	63	
28653	TIHRSG	COAL	6.	1.00	0.050	0.07	52.0	3.95	1.68	2.42	6.86	0.	0.	14.90	1.296	-26.	0	101	
28653	TIHRSG	COAL	6.	3.45	0.125	0.07	93.2	7.08	3.01	3.23	8.69	0.	-2.78	19.23	1.672	-59.	0	100	
28653	STIRL	DISTILL	6.	1.00	0.064	0.07	14.2	1.05	0.45	0.92	14.28	0.	0.	16.69	1.451	-13.	-44	0	
28653	STIRL	DISTILL	6.	6.30	0.221	0.07	31.3	2.32	0.99	1.25	21.53	0.	-6.02	20.06	1.744	-32.	0	57	
28653	STIRL	RESIDUA	6.	1.00	0.064	0.07	14.2	1.05	0.45	0.92	11.65	0.	0.	14.06	1.223	-5.	-26	0	
28653	STIRL	RESIDUA	6.	6.30	0.221	0.07	31.4	2.32	0.99	1.25	17.57	0.	-6.02	16.10	1.400	-19.	0	58	
28653	STIRL	COAL	6.	1.00	0.064	0.07	28.5	2.11	0.90	1.83	6.76	0.	0.	11.61	1.009	-4.	4	16	
28653	STIRL	COAL	6.	6.30	0.221	0.07	54.7	4.05	1.72	2.43	10.20	0.	-6.02	12.38	1.076	-19.	2	19	
28653	HEGT60	COAL-AF	6.	1.00	0.003	0.07	35.7	2.71	1.15	1.92	7.24	0.	0.	13.02	1.132	-12.	0	135	
28653	HEGT60	COAL-AF	6.	25.29	0.014	0.07	173.2	13.14	5.59	6.92	34.63	0.	-27.60	32.67	2.841	-140.	0	74	
28653	HEGT00	COAL-AF	6.	1.00	0.026	0.07	34.5	2.62	1.11	1.90	7.03	0.	0.	12.67	1.101	-10.	0	999	
28653	HEGT00	COAL-AF	6.	5.57	0.087	0.07	61.8	4.69	1.99	2.61	11.22	0.	-5.19	15.32	1.332	-32.	0	209	
28653	FCMCCL	COAL	6.	1.00	0.081	0.07	35.2	2.74	1.16	2.00	6.63	0.	0.	12.54	1.090	-11.	0	999	
28653	FCMCCL	COAL	6.	9.47	0.335	0.07	71.3	5.55	2.36	3.87	11.05	0.	-9.63	13.19	1.147	-31.	2	21	
28653	FCSTCL	COAL	6.	1.00	0.085	0.07	34.6	2.69	1.14	2.03	6.61	0.	0.	12.48	1.085	-10.	0	999	
28653	FCSTCL	COAL	6.	13.01	0.387	0.07	82.3	6.40	2.72	4.52	12.59	0.	-13.65	12.58	1.094	-34.	3	16	
28653	IGOTST	COAL	6.	1.00	0.065	0.07	34.1	2.65	1.13	1.98	6.75	0.	0.	12.50	1.087	-10.	0	999	
28653	IGOTST	COAL	6.	8.83	0.262	0.07	63.9	4.97	2.11	2.38	11.73	0.	-8.89	12.29	1.069	-24.	3	16	
28653	GTSOAR	RESIDUA	6.	1.00	0.060	0.07	14.3	1.06	0.45	0.87	11.69	0.	0.	14.06	1.223	-5.	-26	0	
28653	GTSOAR	RESIDUA	6.	11.11	0.263	0.07	27.6	2.04	0.87	1.12	23.40	0.	-11.49	15.94	1.386	-17.	0	57	
28653	GTAC08	RESIDUA	6.	1.00	0.082	0.07	13.7	1.02	0.43	0.85	11.42	0.	0.	13.72	1.193	-4.	-22	0	
28653	GTAC08	RESIDUA	6.	7.67	0.311	0.07	20.0	1.48	0.63	0.89	17.35	0.	-7.58	12.76	1.110	-3.	-62	0	
28653	GTAC12	RESIDUA	6.	1.00	0.080	0.07	13.7	1.02	0.43	0.85	11.44	0.	0.	13.73	1.194	-4.	-22	0	
28653	GTAC12	RESIDUA	6.	9.64	0.333	0.07	23.8	1.76	0.75	1.00	19.31	0.	-9.82	13.00	1.130	-6.	0	57	
28653	GTAC16	RESIDUA	6.	1.00	0.077	0.07	13.9	1.03	0.44	0.85	11.48	0.	0.	13.80	1.200	-4.	-23	0	
28653	GTAC16	RESIDUA	6.	11.25	0.335	0.07	27.7	2.05	0.87	1.11	21.28	0.	-11.65	13.66	1.188	-10.	0	58	
28653	GTWC16	RESIDUA	6.	1.00	0.072	0.07	14.2	1.05	0.45	0.86	11.54	0.	0.	13.90	1.208	-4.	-25	0	
28653	GTWC16	RESIDUA	6.	11.38	0.316	0.07	26.3	1.95	0.83	1.08	22.07	0.	-11.80	14.12	1.228	-11.	0	57	
28653	CC1626	RESIDUA	6.	1.00	0.070	0.07	14.0	1.06	0.45	0.93	11.57	0.	0.	14.01	1.218	-5.	-26	0	
28653	CC1626	RESIDUA	6.	16.52	0.342	0.07	33.4	2.54	1.08	1.43	27.69	0.	-17.64	15.10	1.313	-17.	0	60	
28653	CC1622	RESIDUA	6.	1.00	0.073	0.07	13.7	1.04	0.44	0.92	11.52	0.	0.	13.93	1.211	-4.	-25	0	
28653	CC1622	RESIDUA	6.	14.82	0.349	0.07	33.2	2.52	1.07	1.39	25.27	0.	-15.71	14.55	1.265	-16.	0	61	
28653	CC1222	RESIDUA	6.	1.00	0.074	0.07	13.5	1.03	0.44	0.92	11.51	0.	0.	13.90	1.208	-4.	-24	0	
28653	CC1222	RESIDUA	6.	14.72	0.352	0.07	31.4	2.38	1.01	1.36	25.04	0.	-15.59	14.21	1.236	-14.	0	61	
28653	CC0822	RESIDUA	6.	1.00	0.080	0.07	13.7	1.04	0.44	0.93	11.45	0.	0.	13.86	1.205	-4.	-24	0	
28653	CC0822	RESIDUA	6.	11.58	0.351	0.07	26.0	1.97	0.84	1.20	21.16	0.	-12.02	13.16	1.144	-8.	0	59	
28653	DEHTPH	RESIDUA	6.	1.00	0.065	0.07	18.1	1.34	0.57	1.04	11.63	0.	0.	14.58	1.268	-8.	-57	0	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT	COST														
		MW		RATIO	*10**6		INSNC		ELEC				WORTH	%	PAY				
													15%		BACK				
28653 DEHTPM	RESIDUA	6.	9.24	0.263	0.07	52.6	3.90	1.66	1.89	20.74	0.	-9.36	18.83	1.637	-38.	0	61		
28653 GTSOAD	DISTILL	6.	1.00	0.075	0.07	13.5	1.00	0.42	0.84	14.10	0.	0.	16.37	1.423	-12.	-39	0		
28653 GTSOAD	DISTILL	6.	9.44	0.308	0.07	21.2	1.57	0.67	0.93	24.20	0.	-9.59	17.78	1.546	-20.	0	55		
28653 GTRA08	DISTILL	6.	1.00	0.060	0.07	14.4	1.07	0.45	0.86	14.33	0.	0.	16.71	1.453	-13.	-45	0		
28653 GTRA08	DISTILL	6.	19.09	0.305	0.07	42.8	3.17	1.35	1.55	40.02	0.	-20.55	25.54	2.221	-54.	0	57		
28653 GTRA12	DISTILL	6.	1.00	0.064	0.07	14.4	1.07	0.45	0.86	14.27	0.	0.	16.65	1.448	-13.	-45	0		
28653 GTRA12	DISTILL	6.	17.81	0.318	0.07	40.0	2.96	1.26	1.47	37.24	0.	-19.10	23.84	2.072	-47.	0	57		
28653 GTRA16	DISTILL	6.	1.00	0.065	0.07	14.7	1.09	0.46	0.87	14.25	0.	0.	16.66	1.449	-13.	-46	0		
28653 GTRA16	DISTILL	6.	16.07	0.317	0.07	39.3	2.91	1.24	1.44	34.47	0.	-17.12	22.93	1.994	-44.	0	57		
28653 GTR208	DISTILL	6.	1.00	0.067	0.07	14.1	1.05	0.44	0.86	14.23	0.	0.	16.58	1.441	-13.	-43	0		
28653 GTR208	DISTILL	6.	12.67	0.303	0.07	29.6	2.19	0.93	1.17	29.65	0.	-13.26	20.68	1.798	-33.	0	56		
28653 GTR212	DISTILL	6.	1.00	0.067	0.07	14.3	1.06	0.45	0.86	14.23	0.	0.	16.59	1.443	-13.	-44	0		
28653 GTR212	DISTILL	6.	13.61	0.310	0.07	32.0	2.37	1.01	1.24	30.88	0.	-14.33	21.17	1.840	-35.	0	57		
28653 GTR216	DISTILL	6.	1.00	0.068	0.07	14.4	1.07	0.45	0.86	14.21	0.	0.	16.59	1.442	-13.	-44	0		
28653 GTR216	DISTILL	6.	14.04	0.318	0.07	34.4	2.55	1.08	1.30	31.20	0.	-14.82	21.31	1.853	-37.	0	57		
28653 GTRW08	DISTILL	6.	1.00	0.052	0.07	14.5	1.08	0.46	0.86	14.46	0.	0.	16.85	1.465	-14.	-47	0		
28653 GTRW08	DISTILL	6.	22.19	0.270	0.07	42.1	3.12	1.33	1.57	47.32	0.	-24.07	29.26	2.544	-65.	0	57		
28653 GTRW12	DISTILL	6.	1.00	0.058	0.07	14.5	1.08	0.46	0.86	14.37	0.	0.	16.76	1.457	-13.	-46	0		
28653 GTRW12	DISTILL	6.	21.65	0.299	0.07	41.3	3.06	1.30	1.54	44.53	0.	-23.47	26.96	2.344	-58.	0	57		
28653 GTRW16	DISTILL	6.	1.00	0.060	0.07	14.7	1.09	0.46	0.87	14.34	0.	0.	16.76	1.457	-13.	-47	0		
28653 GTRW16	DISTILL	6.	19.32	0.303	0.07	39.8	2.95	1.25	1.48	40.52	0.	-20.82	25.39	2.207	-52.	0	57		
28653 GTR308	DISTILL	6.	1.00	0.047	0.07	14.2	1.05	0.45	0.86	14.53	0.	0.	16.89	1.469	-14.	-45	0		
28653 GTR308	DISTILL	6.	16.31	0.229	0.07	33.7	2.49	1.06	1.32	39.38	0.	-17.39	26.87	2.336	-54.	0	56		
28653 GTR312	DISTILL	6.	1.00	0.063	0.07	14.3	1.06	0.45	0.86	14.28	0.	0.	16.65	1.447	-13.	-44	0		
28653 GTR312	DISTILL	6.	15.89	0.305	0.07	32.6	2.41	1.03	1.28	34.78	0.	-16.92	22.58	1.963	-40.	0	56		
28653 GTR316	DISTILL	6.	1.00	0.063	0.07	14.5	1.07	0.46	0.86	14.29	0.	0.	16.68	1.450	-13.	-45	0		
28653 GTR316	DISTILL	6.	15.63	0.303	0.07	33.5	2.48	1.06	1.30	34.46	0.	-16.59	22.70	1.973	-41.	0	57		
28653 FCPADS	DISTILL	6.	1.00	0.050	0.07	15.3	1.13	0.48	1.35	14.48	0.	0.	17.44	1.516	-16.	-57	0		
28653 FCPADS	DISTILL	6.	32.76	0.279	0.07	113.7	8.42	3.58	21.02	64.53	0.	-36.08	61.47	5.344	-203.	0	59		
28653 FCMCDS	DISTILL	6.	1.00	0.067	0.07	15.6	1.15	0.49	1.31	14.23	0.	0.	17.17	1.493	-15.	-57	0		
28653 FCMCDS	DISTILL	6.	25.91	0.360	0.07	97.8	7.25	3.08	15.76	47.08	0.	-28.31	44.86	3.900	-142.	0	60		
28654 ONOCGN	COAL-FG	1.	0.	0.	0.01	16.7	1.27	0.54	1.07	4.32	0.21	0.	7.41	1.000	0.	0	0		
28654 STM141	RESIDUA	1.	1.00	0.017	0.01	8.4	0.63	0.27	0.72	7.52	0.	0.	9.15	1.235	-1.	-17	0		
28654 STM141	RESIDUA	1.	6.88	0.103	0.01	8.6	0.65	0.28	0.62	7.99	0.	-0.75	8.79	1.186	-0.	-15	0		
28654 STM141	COAL-FG	1.	1.00	0.017	0.01	19.8	1.50	0.54	1.46	4.37	0.	0.	7.96	1.075	-3.	0	71		
28654 STM141	COAL-FG	1.	6.88	0.103	0.01	18.6	1.41	0.60	1.24	4.64	0.	-0.75	7.15	0.965	-0.	14	7		
28654 STM141	COAL-AF	1.	1.00	0.017	0.01	19.1	1.45	0.62	1.40	4.37	0.	0.	7.83	1.057	-3.	0	73		
28654 STM141	COAL-AF	1.	6.88	0.103	0.01	13.6	1.03	0.44	1.10	4.64	0.	-0.75	6.46	0.872	4.	999	0		
28654 PFBSTM	COAL-PF	1.	1.00	0.016	0.01	18.8	1.43	0.61	1.35	4.37	0.	0.	7.76	1.047	-2.	0	75		
28654 PFBSTM	COAL-PF	1.	17.93	0.200	0.01	23.2	1.76	0.75	1.77	5.24	0.	-2.16	7.37	0.995	-3.	5	13		
28654 TISTMT	RESIDUA	1.	1.00	0.017	0.01	10.4	0.79	0.33	0.72	7.52	0.	0.	9.36	1.264	-3.	-22	0		
28654 TISTMT	RESIDUA	1.	26.49	0.264	0.01	55.5	4.21	1.79	1.83	9.66	0.	-3.25	14.23	1.921	-40.	0	65		
28654 TISTMT	COAL	1.	1.00	0.017	0.01	21.2	1.61	0.68	1.41	4.37	0.	0.	8.07	1.089	-4.	0	75		
28654 TISTMT	COAL	1.	26.49	0.264	0.01	70.8	5.37	2.28	2.60	5.61	0.	-3.25	12.61	1.702	-42.	0	144		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC		ELEC				WORTH 15%	%	PAY BACK						
28654 TIHRSG	RESIDUA	1.	1.00	0.009	0.01	11.3	0.84	0.36	0.69	7.58	0.	0.	9.47	1.278	-4.	-25	0		
28654 TIHRSG	RESIDUA	1.	21.68	0.125	0.01	57.7	4.27	1.82	1.77	10.58	0.	-2.64	15.80	2.132	-45.	0	62		
28654 TIHRSG	COAL	1.	1.00	0.009	0.01	22.4	1.70	0.72	1.38	4.40	0.	0.	8.21	1.108	-5.	0	75		
28654 TIHRSG	COAL	1.	21.68	0.125	0.01	74.0	5.62	2.39	2.60	6.14	0.	-2.64	14.11	1.905	-48.	0	85		
28654 STIRL	DISTILL	1.	1.00	0.012	0.01	9.0	0.67	0.23	0.64	9.27	0.	0.	10.86	1.466	-7.	-28	0		
28654 STIRL	DISTILL	1.	39.60	0.221	0.01	23.2	1.72	0.73	1.00	15.21	0.	-4.93	13.73	1.854	-23.	0	56		
28654 STIRL	RESIDUA	1.	1.00	0.012	0.01	9.0	0.67	0.28	0.64	7.56	0.	0.	9.15	1.236	-2.	-18	0		
28654 STIRL	RESIDUA	1.	39.60	0.221	0.01	23.3	1.72	0.73	1.00	12.41	0.	-4.93	10.94	1.476	-14.	0	57		
28654 STIRL	COAL	1.	1.00	0.012	0.01	19.4	1.44	0.61	1.30	4.39	0.	0.	7.74	1.045	-2.	0	78		
28654 STIRL	COAL	1.	39.60	0.221	0.01	41.2	3.05	1.30	1.91	7.21	0.	-4.93	8.54	1.152	-15.	0	29		
28654 HEGT60	COAL-AF	1.	1.00	0.000	0.01	19.0	1.44	0.61	1.23	4.45	0.	0.	7.72	1.043	-2.	0	78		
28654 HEGT60	COAL-AF	1.	158.97	0.014	0.01	139.1	10.55	4.49	5.43	24.46	0.	-20.18	24.76	3.342	-113.	0	73		
28654 HEGT00	COAL-AF	1.	1.00	0.005	0.01	18.9	1.43	0.61	1.23	4.42	0.	0.	7.70	1.039	-2.	0	82		
28654 HEGT00	COAL-AF	1.	35.01	0.087	0.01	49.6	3.76	1.60	2.07	7.93	0.	-4.34	11.02	1.488	-27.	0	94		
28654 FCMCCL	COAL	1.	1.00	0.015	0.01	21.5	1.67	0.71	1.31	4.38	0.	0.	8.07	1.089	-5.	0	82		
28654 FCMCCL	COAL	1.	59.55	0.335	0.01	57.0	4.43	1.88	3.00	7.81	0.	-7.48	9.64	1.302	-27.	0	999		
28654 FCSTCL	COAL	1.	1.00	0.015	0.01	21.4	1.66	0.71	1.35	4.38	0.	0.	8.10	1.094	-5.	0	79		
28654 FCSTCL	COAL	1.	70.50	0.365	0.01	61.6	4.79	2.04	3.31	8.32	0.	-8.88	9.58	1.294	-29.	0	28		
28654 IGGTST	COAL	1.	1.00	0.011	0.01	20.8	1.61	0.69	1.38	4.39	0.	0.	8.07	1.090	-4.	0	75		
28654 IGGTST	COAL	1.	45.61	0.227	0.01	48.4	3.76	1.60	1.91	7.73	0.	-5.70	9.31	1.256	-22.	0	999		
28654 GTSOAR	RESIDUA	1.	1.00	0.011	0.01	8.3	0.62	0.26	0.60	7.57	0.	0.	9.04	1.220	-1.	-18	0		
28654 GTSOAR	RESIDUA	1.	69.83	0.263	0.01	21.9	1.62	0.69	0.93	16.53	0.	-8.79	10.98	1.483	-13.	0	57		
28654 GTAC08	RESIDUA	1.	1.00	0.015	0.01	8.2	0.61	0.26	0.59	7.54	0.	0.	9.00	1.214	-1.	-16	0		
28654 GTAC08	RESIDUA	1.	48.22	0.311	0.01	15.9	1.18	0.50	0.74	12.26	0.	-6.03	8.65	1.167	-3.	-52	0		
28654 GTAC12	RESIDUA	1.	1.00	0.015	0.01	8.1	0.60	0.26	0.59	7.54	0.	0.	8.99	1.213	-1.	-16	0		
28654 GTAC12	RESIDUA	1.	60.62	0.333	0.01	18.8	1.39	0.59	0.83	13.64	0.	-7.61	8.84	1.193	-5.	0	56		
28654 GTAC16	RESIDUA	1.	1.00	0.014	0.01	8.1	0.60	0.26	0.59	7.55	0.	0.	8.99	1.214	-1.	-16	0		
28654 GTAC16	RESIDUA	1.	70.73	0.335	0.01	21.8	1.61	0.69	0.92	15.03	0.	-8.91	9.34	1.261	-8.	0	58		
28654 GTWC16	RESIDUA	1.	1.00	0.013	0.01	8.3	0.61	0.26	0.59	7.55	0.	0.	9.02	1.217	-1.	-16	0		
28654 GTWC16	RESIDUA	1.	71.54	0.316	0.01	21.0	1.56	0.66	0.90	15.59	0.	-9.01	9.70	1.310	-9.	0	57		
28654 DEHTPM	RESIDUA	1.	1.00	0.012	0.01	9.3	0.69	0.29	0.66	7.56	0.	0.	9.20	1.242	-2.	-19	0		
28654 DEHTPM	RESIDUA	1.	58.08	0.263	0.01	38.9	2.88	1.22	1.49	14.66	0.	-7.29	12.96	1.749	-28.	0	61		
28654 GTSOAR	DISTILL	1.	1.00	0.014	0.01	8.1	0.60	0.25	0.59	9.25	0.	0.	10.70	1.444	-6.	-25	0		
28654 GTSOAR	DISTILL	1.	59.33	0.308	0.01	16.8	1.25	0.53	0.78	17.10	0.	-7.45	12.20	1.647	-15.	999	0		
28654 GTRA08	DISTILL	1.	1.00	0.011	0.01	8.3	0.62	0.26	0.59	9.28	0.	0.	10.75	1.451	-6.	-26	0		
28654 GTRA08	DISTILL	1.	119.96	0.305	0.01	34.0	2.52	1.07	1.28	28.27	0.	-15.19	17.96	2.424	-41.	0	57		
28654 GTRA12	DISTILL	1.	1.00	0.012	0.01	8.3	0.61	0.26	0.59	9.27	0.	0.	10.73	1.449	-6.	-26	0		
28654 GTRA12	DISTILL	1.	111.93	0.318	0.01	31.6	2.34	0.99	1.21	26.31	0.	-14.17	16.69	2.252	-36.	0	57		
28654 GTRA16	DISTILL	1.	1.00	0.012	0.01	8.3	0.62	0.26	0.59	9.27	0.	0.	10.74	1.450	-6.	-26	0		
28654 GTRA16	DISTILL	1.	101.00	0.317	0.01	31.0	2.30	0.98	1.19	24.35	0.	-12.77	16.04	2.165	-34.	0	57		
28654 GTR208	DISTILL	1.	1.00	0.012	0.01	8.2	0.61	0.26	0.59	9.27	0.	0.	10.73	1.448	-6.	-26	0		
28654 GTR208	DISTILL	1.	79.65	0.303	0.01	23.4	1.73	0.74	0.97	20.94	0.	-10.05	14.34	1.936	-25.	0	56		
28654 GTR212	DISTILL	1.	1.00	0.012	0.01	8.3	0.61	0.26	0.59	9.27	0.	0.	10.73	1.448	-6.	-26	0		
28654 GTR212	DISTILL	1.	85.57	0.310	0.01	25.3	1.87	0.80	1.03	21.82	0.	-10.80	14.72	1.987	-27.	0	57		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	/HEAT COST										WORTH	%	PAY	BACK		
		MW	REQD	RATIO *10**6		INSNC	ELEC							15%					
28654	GTR216	DISTILL	1.	1.00	0.012	0.01	8.3	0.61	0.26	0.59	9.26	0.	0.	10.73	1.448	-6.	-26	0	
28654	GTR216	DISTILL	1.	88.27	0.318	0.01	27.2	2.01	0.86	1.08	22.04	0.	-11.15	14.84	2.003	-28.	0	57	
28654	GTRW08	DISTILL	1.	1.00	0.009	0.01	8.3	0.62	0.26	0.59	9.29	0.	0.	10.77	1.453	-6.	-26	0	
28654	GTRW08	DISTILL	1.	139.46	0.270	0.01	33.7	2.49	1.06	1.30	33.43	0.	-17.68	20.60	2.781	-49.	0	57	
28654	GTRW12	DISTILL	1.	1.00	0.011	0.01	8.4	0.62	0.26	0.59	9.28	0.	0.	10.75	1.452	-6.	-26	0	
28654	GTRW12	DISTILL	1.	136.09	0.299	0.01	33.0	2.45	1.04	1.28	31.46	0.	-17.25	18.97	2.560	-44.	0	57	
28654	GTRW16	DISTILL	1.	1.00	0.011	0.01	8.4	0.62	0.26	0.59	9.28	0.	0.	10.76	1.452	-6.	-26	0	
28654	GTRW16	DISTILL	1.	121.45	0.303	0.01	31.9	2.36	1.00	1.23	28.63	0.	-15.38	17.84	2.408	-40.	0	57	
28654	GTR308	DISTILL	1.	1.00	0.009	0.01	8.2	0.61	0.26	0.59	9.30	0.	0.	10.76	1.453	-6.	-26	0	
28654	GTR308	DISTILL	1.	102.51	0.229	0.01	26.8	1.99	0.85	1.10	27.82	0.	-12.96	18.80	2.537	-40.	0	56	
28654	GTR312	DISTILL	1.	1.00	0.012	0.01	8.3	0.62	0.26	0.59	9.27	0.	0.	10.74	1.450	-6.	-26	0	
28654	GTR312	DISTILL	1.	99.89	0.305	0.01	26.0	1.93	0.82	1.06	24.57	0.	-12.63	15.76	2.127	-30.	0	56	
28654	GTR316	DISTILL	1.	1.00	0.011	0.01	8.4	0.62	0.26	0.59	9.27	0.	0.	10.75	1.451	-6.	-26	0	
28654	GTR316	DISTILL	1.	98.08	0.303	0.01	26.8	1.99	0.84	1.08	24.34	0.	-12.40	15.86	2.140	-31.	0	57	
28654	FCPADS	DISTILL	1.	1.00	0.009	0.01	9.0	0.66	0.28	0.63	9.30	0.	0.	10.87	1.468	-7.	-28	0	
28654	FCPADS	DISTILL	1.	205.90	0.279	0.01	84.3	6.24	2.65	15.00	45.59	0.	-26.17	43.32	5.848	-146.	0	59	
28654	FCMCDS	DISTILL	1.	1.00	0.012	0.01	9.0	0.67	0.28	0.62	9.27	0.	0.	10.84	1.463	-7.	-28	0	
28654	FCMCDS	DISTILL	1.	162.88	0.360	0.01	72.3	5.36	2.28	11.26	33.26	0.	-20.67	31.48	4.250	-103.	0	60	
28691	ONOCGN	COAL-FG	2.	0.	0.	0.04	12.0	0.91	0.39	0.81	0.	0.45	0.	2.57	1.000	0.	0	0	
28691	PFBSTM	COAL-PF	2.	1.00	1.000	0.04	15.9	1.21	0.51	1.24	0.	0.	0.	2.96	1.151	-3.	0	877	
28691	PFBSTM	COAL-PF	2.	4.01	1.000	0.04	16.0	1.21	0.52	1.24	0.	0.	-0.82	2.15	0.834	-1.	12	8	
28691	TIHRSG	RESIDUA	2.	1.00-1.274	0.04	0.04	14.0	1.04	0.44	0.74	1.04	0.	0.	3.26	1.269	-3.	0	58	
28691	TIHRSG	COAL	2.	1.00-1.000	0.04	0.04	23.3	1.77	0.75	1.32	0.	0.	0.	3.83	1.491	-9.	0	96	
28691	TIHRSG	COAL	2.	6.57-1.000	0.04	0.04	53.8	4.08	1.73	1.94	0.	0.	-1.52	6.24	2.426	-32.	0	451	
28691	HEGT00	COAL-AF	2.	1.00-1.000	0.04	0.04	17.1	1.30	0.55	1.09	0.	0.	0.	2.94	1.143	-4.	0	999	
28691	HEGT00	COAL-AF	2.	10.17-1.000	0.04	0.04	35.5	2.69	1.14	1.49	0.	0.	-2.50	2.83	1.099	-12.	4	15	
28691	FCMCCL	COAL	2.	1.00-9.257	0.04	0.04	18.0	1.40	0.59	1.13	2.73	0.	0.	5.85	2.276	-13.	0	58	
28691	FCMCCL	COAL	2.	16.89-0.053	0.04	0.04	39.9	3.10	1.32	2.06	4.73	0.	-4.34	6.87	2.672	-27.	0	71	
28691	GTSQAR	RESIDUA	2.	1.00-0.103	0.04	0.04	6.8	0.50	0.21	0.54	0.51	0.	0.	1.76	0.684	5.	999	0	
28691	GTAC08	RESIDUA	2.	1.00-0.185	0.04	0.04	6.5	0.48	0.20	0.53	0.54	0.	0.	1.76	0.684	5.	999	0	
28691	GTAC12	RESIDUA	2.	1.00-0.049	0.04	0.04	6.4	0.48	0.20	0.52	0.48	0.	0.	1.69	0.655	6.	999	0	
28691	GTAC16	RESIDUA	2.	1.00-0.009	0.04	0.04	6.5	0.48	0.20	0.52	0.45	0.	0.	1.66	0.646	6.	999	0	
28691	GTWC16	RESIDUA	2.	1.00-0.016	0.04	0.04	6.7	0.50	0.21	0.53	0.47	0.	0.	1.70	0.662	5.	999	0	
28691	GTSQAD	DISTILL	2.	1.00-0.096	0.04	0.04	6.4	0.47	0.20	0.52	0.62	0.	0.	1.81	0.705	5.	999	0	
28691	GTRA08	DISTILL	2.	1.00-0.104	0.04	0.04	6.8	0.50	0.21	0.53	0.50	0.	0.	1.75	0.682	5.	999	0	
28691	GTRA12	DISTILL	2.	1.00-0.106	0.04	0.04	6.7	0.50	0.21	0.53	0.50	0.	0.	1.74	0.678	5.	999	0	
28691	GTRA16	DISTILL	2.	1.00-0.083	0.04	0.04	6.9	0.51	0.22	0.53	0.52	0.	0.	1.77	0.689	5.	999	0	
28691	GTR208	DISTILL	2.	1.00-0.000	0.04	0.04	6.7	0.50	0.21	0.53	0.56	0.	0.	1.80	0.700	5.	999	0	
28691	GTR212	DISTILL	2.	1.00-0.030	0.04	0.04	6.8	0.50	0.21	0.53	0.54	0.	0.	1.79	0.696	5.	999	0	
28691	GTR216	DISTILL	2.	1.00-0.050	0.04	0.04	6.8	0.50	0.21	0.53	0.53	0.	0.	1.78	0.692	5.	999	0	
28691	GTRW08	DISTILL	2.	1.00-0.088	0.04	0.04	6.9	0.51	0.22	0.53	0.51	0.	0.	1.77	0.688	5.	999	0	
28691	GTRW12	DISTILL	2.	1.00-0.121	0.04	0.04	6.9	0.51	0.22	0.53	0.49	0.	0.	1.75	0.681	5.	999	0	
28691	GTRW16	DISTILL	2.	1.00-0.104	0.04	0.04	7.0	0.52	0.22	0.53	0.50	0.	0.	1.78	0.690	5.	999	0	
28691	GTR308	DISTILL	2.	1.00-0.032	0.04	0.04	6.7	0.49	0.21	0.53	0.58	0.	0.	1.81	0.705	5.	999	0	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	RATIO *10**6	INSNC			ELEC							WORTH	%	PAY	BACK
		MW	REQD													15%			
28691 GTR312 DISTILL	2.	1.00	0.064	0.04	6.8	0.50	0.21	0.53	0.53	0.	0.	1.78	0.691	5.	999	0			
28691 GTR316 DISTILL	2.	1.00	0.056	0.04	6.9	0.51	0.22	0.53	0.53	0.	0.	1.79	0.697	5.	999	0			
28691 FCPADS DISTILL	2.	1.00	0.158	0.04	7.0	0.52	0.22	0.62	0.47	0.	0.	1.82	0.709	5.	999	0			
28691 FCMCDS DISTILL	2.	1.00	0.223	0.04	7.0	0.52	0.22	0.60	0.44	0.	0.	1.78	0.693	5.	999	0			
28692 ONOCGN COAL-FG	6.	0.	0.	0.13	13.0	0.99	0.42	0.87	2.94	1.73	0.	6.95	1.000	0.	0	0			
28692 PFBSTM COAL-PF	6.	0.83	0.116	0.13	16.2	1.23	0.52	1.29	3.33	0.29	0.	6.66	0.957	-1.	11	8			
28692 TIHRSG RESIDUA	6.	1.00	0.046	0.13	30.6	2.26	0.96	1.21	6.50	0.	0.	10.94	1.573	-21.	0	61			
28692 TIHRSG RESIDUA	6.	2.00	0.073	0.13	46.5	3.45	1.47	1.46	7.93	0.	-1.04	13.27	1.908	-35.	0	64			
28692 TIHRSG COAL	6.	1.00	0.046	0.13	43.4	3.29	1.40	1.95	3.78	0.	0.	10.41	1.497	-25.	0	90			
28692 TIHRSG COAL	6.	2.00	0.073	0.13	59.8	4.54	1.93	2.14	4.61	0.	-1.04	12.18	1.751	-39.	0	91			
28692 HEGT00 COAL-AF	6.	1.00	0.035	0.13	26.8	2.03	0.86	1.46	3.82	0.	0.	8.18	1.176	-10.	0	***			
28692 HEGT00 COAL-AF	6.	3.04	0.070	0.13	38.8	2.95	1.25	1.63	5.61	0.	-2.12	9.31	1.339	-20.	0	224			
28692 FCMCCL COAL	6.	1.00	0.135	0.13	25.8	2.01	0.85	1.52	3.43	0.	0.	7.80	1.122	-9.	0	999			
28692 FCMCCL COAL	6.	5.02	0.333	0.13	43.5	3.38	1.44	2.25	5.36	0.	-4.13	8.25	1.187	-19.	1	25			
28692 GTSOAR RESIDUA	6.	1.00	0.086	0.13	9.4	0.70	0.30	0.67	6.23	0.	0.	7.90	1.136	-1.	-19	0			
28692 GTSOAR RESIDUA	6.	6.61	0.233	0.13	17.9	1.32	0.56	0.80	12.75	0.	-5.84	9.59	1.380	-10.	0	57			
28692 GTAC08 RESIDUA	6.	1.00	0.136	0.13	8.7	0.65	0.27	0.65	5.89	0.	0.	7.46	1.073	1.	-12	0			
28692 GTAC08 RESIDUA	6.	4.06	0.309	0.13	11.9	0.89	0.38	0.60	8.41	0.	-3.19	7.09	1.019	0.	-11	0			
28692 GTAC12 RESIDUA	6.	1.00	0.136	0.13	8.7	0.65	0.27	0.64	5.89	0.	0.	7.46	1.072	1.	-12	0			
28692 GTAC12 RESIDUA	6.	5.01	0.336	0.13	13.8	1.02	0.44	0.66	9.17	0.	-4.17	7.12	1.024	-1.	0	54			
28692 GTAC16 RESIDUA	6.	1.00	0.126	0.13	8.9	0.66	0.28	0.65	5.96	0.	0.	7.55	1.005	0.	-14	0			
28692 GTAC16 RESIDUA	6.	6.00	0.332	0.13	16.3	1.21	0.51	0.73	10.39	0.	-5.20	7.63	1.098	-3.	0	60			
28692 GTWC16 RESIDUA	6.	1.00	0.120	0.13	9.2	0.68	0.29	0.66	6.00	0.	0.	7.63	1.097	-0.	-15	0			
28692 GTWC16 RESIDUA	6.	5.98	0.316	0.13	15.9	1.18	0.50	0.73	10.62	0.	-5.18	7.84	1.127	-4.	0	58			
28692 GTSOAR DISTILL	6.	1.00	0.126	0.13	8.5	0.63	0.27	0.64	7.31	0.	0.	8.84	1.272	-4.	-27	0			
28692 GTSOAR DISTILL	6.	4.95	0.309	0.13	12.6	0.93	0.40	0.63	11.62	0.	-4.11	9.46	1.360	-7.	148	0			
28692 GTRA03 DISTILL	6.	1.00	0.081	0.13	9.5	0.71	0.30	0.67	7.68	0.	0.	9.35	1.345	-6.	-38	0			
28692 GTRA03 DISTILL	6.	13.60	0.261	0.13	29.7	2.20	0.94	1.16	26.10	0.	-13.10	17.30	2.497	-40.	0	57			
28692 GTRA12 DISTILL	6.	1.00	0.091	0.13	9.5	0.70	0.30	0.67	7.60	0.	0.	9.27	1.333	-5.	-37	0			
28692 GTRA12 DISTILL	6.	11.69	0.284	0.13	27.5	2.04	0.87	1.09	22.37	0.	-11.12	15.25	2.192	-33.	0	57			
28692 GTRA16 DISTILL	6.	1.00	0.096	0.13	9.8	0.72	0.31	0.67	7.56	0.	0.	9.26	1.332	-6.	-39	0			
28692 GTRA16 DISTILL	6.	9.99	0.290	0.13	26.0	1.93	0.82	1.03	19.60	0.	-9.34	14.04	2.018	-28.	0	57			
28692 GTR208 DISTILL	6.	1.00	0.102	0.13	9.3	0.69	0.29	0.66	7.51	0.	0.	9.14	1.315	-5.	-34	0			
28692 GTR208 DISTILL	6.	7.30	0.285	0.13	18.6	1.38	0.59	0.82	15.63	0.	-6.55	11.86	1.706	-18.	0	56			
28692 GTR212 DISTILL	6.	1.00	0.102	0.13	9.4	0.70	0.30	0.66	7.50	0.	0.	9.16	1.317	-5.	-35	0			
28692 GTR212 DISTILL	6.	7.88	0.291	0.13	20.2	1.50	0.64	0.86	16.37	0.	-7.16	12.21	1.756	-20.	0	57			
28692 GTR216 DISTILL	6.	1.00	0.104	0.13	9.5	0.71	0.30	0.67	7.49	0.	0.	9.16	1.318	-5.	-36	0			
28692 GTR216 DISTILL	6.	8.21	0.299	0.13	21.8	1.61	0.69	0.90	16.69	0.	-7.50	12.39	1.782	-21.	0	57			
28692 GTRW08 DISTILL	6.	1.00	0.072	0.13	9.6	0.71	0.30	0.67	7.76	0.	0.	9.45	1.358	-6.	-40	0			
28692 GTRW08 DISTILL	6.	15.06	0.236	0.13	30.2	2.24	0.95	1.19	29.39	0.	-14.62	19.15	2.754	-46.	0	57			
28692 GTRW12 DISTILL	6.	1.00	0.085	0.13	9.7	0.72	0.30	0.67	7.65	0.	0.	9.33	1.342	-6.	-39	0			
28692 GTRW12 DISTILL	6.	13.70	0.275	0.13	28.3	2.10	0.89	1.13	25.80	0.	-13.21	16.70	2.401	-38.	0	57			
28692 GTRW16 DISTILL	6.	1.00	0.091	0.13	9.9	0.73	0.31	0.67	7.60	0.	0.	9.31	1.339	-6.	-40	0			
28692 GTRW16 DISTILL	6.	11.53	0.284	0.13	26.3	1.95	0.83	1.05	22.13	0.	-10.95	15.01	2.159	-31.	0	57			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES	GEN/	/HEAT COST						PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS			
SYSTEM	FUEL	REQD	REQD	RATIO *10**6	INSNC	ELEC													
		MW																	
28692 GTR308 DISTILL	6.	1.00	0.067	0.13	9.2	0.69	0.29	0.67	7.80	0.	9.44	1.358	-6.	-37	0				
28692 GTR308 DISTILL	6.	9.90	0.202	0.13	22.2	1.64	0.70	0.95	21.89	0.	-9.26	15.92	2.289	-32.	0	56			
28692 GTR312 DISTILL	6.	1.00	0.101	0.13	9.4	0.70	0.30	0.66	7.51	0.	0.	9.17	1.318	-5.	-35	0			
28692 GTR312 DISTILL	6.	8.75	0.297	0.13	20.3	1.51	0.64	0.87	17.53	0.	-8.06	12.49	1.796	-21.	0	57			
28692 GTR316 DISTILL	6.	1.00	0.101	0.13	9.7	0.71	0.30	0.67	7.51	0.	0.	9.20	1.323	-5.	-37	0			
28692 GTR316 DISTILL	6.	8.56	0.295	0.13	20.9	1.55	0.66	0.89	17.30	0.	-7.86	12.53	1.802	-21.	0	57			
28692 FCPADS DISTILL	6.	1.00	0.084	0.13	9.8	0.73	0.31	1.09	7.66	0.	0.	9.79	1.408	-7.	-46	0			
28692 FCPADS DISTILL	6.	17.24	0.279	0.13	58.1	4.30	1.83	10.30	31.08	0.	-16.89	30.62	4.403	-96.	0	59			
28692 FCMCDS DISTILL	6.	1.00	0.112	0.13	10.1	0.75	0.32	1.06	7.42	0.	0.	9.54	1.372	-7.	-46	0			
28692 FCMCDS DISTILL	6.	13.64	0.360	0.13	50.1	3.71	1.58	7.74	22.68	0.	-13.14	22.57	3.245	-67.	0	60			
28693 ONOCGN COAL-FG	4.	0.	0.	0.04	22.7	1.72	0.73	1.38	6.18	1.09	0.	11.12	1.000	0.	0	0			
28693 STM141 RESIDUA	4.	1.00	0.059	0.04	13.7	1.04	0.44	0.96	11.07	0.	0.	13.51	1.214	-3.	-20	0			
28693 STM141 RESIDUA	4.	5.17	0.217	0.04	15.6	1.19	0.50	0.86	12.80	0.	-2.74	12.61	1.134	-1.	-17	0			
28693 STM141 COAL-FG	4.	1.00	0.059	0.04	28.6	2.17	0.92	1.94	6.43	0.	0.	11.46	1.031	-4.	0	999			
28693 STM141 COAL-FG	4.	5.17	0.217	0.04	29.1	2.21	0.94	1.75	7.43	0.	-2.74	9.59	0.862	2.	19	5			
28693 STM141 COAL-AF	4.	1.00	0.059	0.04	26.9	2.04	0.87	1.85	6.43	0.	0.	11.19	1.006	-2.	4	17			
28693 STM141 COAL-AF	4.	5.17	0.217	0.04	20.7	1.57	0.67	1.57	7.43	0.	-2.74	8.50	0.765	9.	999	0			
28693 STM088 RESIDUA	4.	1.00	0.059	0.04	12.2	0.93	0.39	0.94	11.07	0.	0.	13.33	1.199	-2.	-17	0			
28693 STM088 RESIDUA	4.	3.61	0.170	0.04	13.9	1.06	0.45	0.82	12.15	0.	-1.71	12.76	1.147	-1.	-16	0			
28693 STM088 COAL-FG	4.	1.00	0.059	0.04	28.9	2.19	0.93	1.96	6.43	0.	0.	11.51	1.035	-4.	0	999			
28693 STM088 COAL-FG	4.	3.61	0.170	0.04	26.9	2.04	0.87	1.64	7.05	0.	-1.71	9.89	0.890	2.	22	5			
28693 STM088 COAL-AF	4.	1.00	0.059	0.04	26.7	2.03	0.86	1.88	6.43	0.	0.	11.19	1.007	-2.	3	17			
28693 STM088 COAL-AF	4.	3.61	0.170	0.04	19.6	1.49	0.63	1.51	7.05	0.	-1.71	8.97	0.807	8.	999	0			
28693 PFBSTM COAL-PF	4.	1.00	0.057	0.04	27.9	2.12	0.90	1.92	6.44	0.	0.	11.37	1.023	-3.	0	28			
28693 PFBSTM COAL-PF	4.	8.79	0.290	0.04	35.0	2.66	1.13	2.65	8.39	0.	-5.12	9.71	0.874	-2.	12	8			
28693 TISTMT RESIDUA	4.	1.00	0.058	0.04	25.0	1.90	0.81	1.21	11.08	0.	0.	15.00	1.349	-13.	0	56			
28693 TISTMT RESIDUA	4.	10.70	0.322	0.04	81.2	6.16	2.62	2.71	15.22	0.	-6.37	20.34	1.829	-57.	0	68			
28693 TISTMT COAL	4.	1.00	0.058	0.04	36.9	2.80	1.19	2.09	6.43	0.	0.	12.51	1.125	-11.	0	169			
28693 TISTMT COAL	4.	11.89	0.338	0.04	109.0	8.27	3.52	3.82	9.13	0.	-7.16	17.58	1.581	-62.	0	999			
28693 TIHRSG RESIDUA	4.	1.00	0.043	0.04	27.6	2.04	0.87	1.22	11.25	0.	0.	15.38	1.383	-15.	0	56			
28693 TIHRSG RESIDUA	4.	5.59	0.166	0.04	72.9	5.40	2.30	2.36	14.02	0.	-3.01	21.06	1.894	-54.	0	63			
28693 TIHRSG COAL	4.	1.00	0.043	0.04	43.7	3.32	1.41	2.21	6.53	0.	0.	13.48	1.212	-18.	0	94			
28693 TIHRSG COAL	4.	6.21	0.178	0.04	98.7	7.49	3.19	3.40	8.36	0.	-3.42	19.02	1.710	-61.	0	105			
28693 STIRL DISTILL	4.	1.00	0.042	0.04	18.2	1.34	0.57	0.99	13.81	0.	0.	16.72	1.503	-15.	-59	0			
28693 STIRL DISTILL	4.	13.54	0.259	0.04	37.2	2.76	1.17	1.59	23.26	0.	-8.24	20.54	1.847	-36.	0	57			
28693 STIRL RESIDUA	4.	1.00	0.042	0.04	18.2	1.35	0.57	0.99	11.27	0.	0.	14.17	1.275	-7.	-36	0			
28693 STIRL RESIDUA	4.	13.54	0.259	0.04	37.3	2.76	1.17	1.59	18.98	0.	-8.24	16.26	1.462	-23.	0	59			
28693 STIRL COAL	4.	1.00	0.042	0.04	28.8	2.13	0.91	1.82	6.54	0.	0.	11.40	1.025	-3.	0	30			
28693 STIRL COAL	4.	15.05	0.270	0.04	68.8	5.10	2.17	2.92	11.55	0.	-9.23	12.51	1.125	-26.	2	20			
28693 HEGT85 COAL-AF	4.	1.00	0.013	0.04	32.6	2.47	1.05	1.82	6.73	0.	0.	12.08	1.066	-8.	0	165			
28693 HEGT85 COAL-AF	4.	77.36	0.126	0.04	269.1	20.42	8.68	10.24	48.71	0.	-50.16	37.91	3.409	-202.	0	99			
28693 HEGT60 COAL-AF	4.	1.00	0.018	0.04	32.3	2.45	1.04	1.82	6.71	0.	0.	12.02	1.081	-7.	0	240			
28693 HEGT60 COAL-AF	4.	25.39	0.135	0.04	121.0	9.18	3.90	4.69	19.41	0.	-16.02	21.17	1.904	-79.	0	116			
28693 HEGT00 COAL-AF	4.	1.00	0.021	0.04	31.9	2.42	1.03	1.83	6.68	0.	0.	11.96	1.075	-7.	0	445			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT	COST											WORTH	%	PAY	
		MW		RATIO	*10**6		INSNC		ELEC							15%		BACK	
28693 HEGT00	COAL-AF	4.	10.27	0.117	0.04	66.3	5.03	2.14	2.78	11.27	0.	-6.09	15.14	1.361	-34.	0		219	
28693 FCNCC1	COAL	4.	1.00	0.051	0.04	34.3	2.67	1.13	1.94	7.17	0.	0.	12.91	1.161	-12.	0		73	
28693 FCNCC1	COAL	4.	18.30	0.311	0.04	79.4	6.17	2.62	4.28	12.34	0.	-11.36	14.05	1.264	-37.	0		30	
28693 FCSTCL	COAL	4.	1.00	0.049	0.04	33.7	2.62	1.11	1.97	7.16	0.	0.	12.87	1.157	-11.	0		73	
28693 FCSTCL	COAL	4.	26.65	0.376	0.04	94.2	7.33	3.11	5.13	14.51	0.	-16.85	13.23	1.190	-42.	2		20	
28693 IGGTST	COAL	4.	1.00	0.060	0.04	32.8	2.55	1.08	1.96	7.23	0.	0.	12.82	1.153	-11.	0		70	
28693 IGGTST	COAL	4.	18.33	0.246	0.04	72.7	5.65	2.40	2.64	13.52	0.	-11.38	12.83	1.153	-30.	2		21	
28693 GTSDAR	RESIDUA	4.	1.00	0.042	0.04	17.3	1.28	0.55	0.93	11.26	0.	0.	14.02	1.261	-6.	-31		0	
28693 GTSDAR	RESIDUA	4.	17.54	0.288	0.04	28.5	2.11	0.90	1.30	21.35	0.	-10.86	14.80	1.331	-14.	0		57	
28693 GTAC08	RESIDUA	4.	1.00	0.050	0.04	16.8	1.25	0.53	0.92	11.17	0.	0.	13.87	1.247	-6.	-28		0	
28693 GTAC08	RESIDUA	4.	13.46	0.310	0.04	22.5	1.67	0.71	1.13	17.59	0.	-8.18	12.92	1.162	-5.	118		0	
28693 GTAC12	RESIDUA	4.	1.00	0.049	0.04	16.8	1.25	0.53	0.92	11.18	0.	0.	13.87	1.247	-6.	-28		0	
28693 GTAC12	RESIDUA	4.	16.85	0.333	0.04	26.5	1.96	0.83	1.24	19.50	0.	-10.41	13.13	1.181	-8.	0		57	
28693 GTAC16	RESIDUA	4.	1.00	0.048	0.04	16.9	1.25	0.53	0.92	11.19	0.	0.	13.89	1.249	-6.	-29		0	
28693 GTAC16	RESIDUA	4.	19.15	0.341	0.04	30.1	2.23	0.95	1.34	20.93	0.	-11.92	13.52	1.216	-11.	0		58	
28693 GTWC16	RESIDUA	4.	1.00	0.044	0.04	17.2	1.27	0.54	0.93	11.24	0.	0.	13.98	1.257	-6.	-30		0	
28693 GTWC16	RESIDUA	4.	19.96	0.315	0.04	29.1	2.15	0.92	1.33	22.37	0.	-12.46	14.31	1.287	-13.	0		57	
28693 CC1626	RESIDUA	4.	1.00	0.043	0.04	16.9	1.29	0.55	0.99	11.25	0.	0.	14.07	1.265	-6.	-32		0	
28693 CC1626	RESIDUA	4.	30.31	0.348	0.04	37.5	2.85	1.21	1.72	28.73	0.	-19.25	15.26	1.372	-20.	0		60	
28693 CC1622	RESIDUA	4.	1.00	0.045	0.04	16.7	1.27	0.54	0.98	11.22	0.	0.	14.01	1.260	-6.	-30		0	
28693 CC1622	RESIDUA	4.	27.24	0.356	0.04	37.4	2.84	1.21	1.68	26.21	0.	-17.23	14.70	1.322	-18.	0		61	
28693 CC1222	RESIDUA	4.	1.00	0.046	0.04	16.6	1.26	0.54	0.98	11.22	0.	0.	13.99	1.258	-6.	-30		0	
28693 CC1222	RESIDUA	4.	27.08	0.359	0.04	35.5	2.70	1.15	1.65	25.98	0.	-17.13	14.34	1.290	-16.	0		61	
28693 CC0622	RESIDUA	4.	1.00	0.049	0.04	16.8	1.27	0.54	0.99	11.18	0.	0.	13.98	1.257	-6.	-30		0	
28693 CC0622	RESIDUA	4.	21.43	0.360	0.04	29.7	2.26	0.96	1.47	21.95	0.	-13.42	13.22	1.189	-10.	0		60	
28693 STIG15	RESIDUA	4.	1.00	0.016	0.04	16.9	1.25	0.53	0.94	11.56	0.	0.	14.29	1.205	-7.	-32		0	
28693 STIG15	RESIDUA	4.	751.59	0.171	0.04	671.0	49.70	21.13	39.66	696.39	0.	-493.01	314.07	28.243	-1256.	0		58	
28693 STIG10	RESIDUA	4.	1.00	0.023	0.04	16.7	1.24	0.53	0.93	11.48	0.	0.	14.17	1.275	-6.	-30		0	
28693 STIG10	RESIDUA	4.	69.50	0.218	0.04	75.9	5.62	2.39	4.04	68.32	0.	-44.99	35.33	3.182	-101.	0		58	
28693 STIG15	RESIDUA	4.	1.00	0.026	0.04	16.6	1.23	0.52	0.93	11.44	0.	0.	14.13	1.271	-6.	-30		0	
28693 STIG15	RESIDUA	4.	40.78	0.223	0.04	47.1	3.48	1.48	2.73	42.95	0.	-26.13	24.51	2.204	-53.	0		58	
28693 DEADV3	RESIDUA	4.	1.00	0.032	0.04	20.1	1.49	0.63	1.02	11.37	0.	0.	14.51	1.305	-9.	-57		0	
28693 DEADV3	RESIDUA	4.	46.41	0.286	0.04	111.5	8.26	3.51	3.62	44.17	0.	-29.83	29.72	2.673	-100.	0		63	
28693 DEHTM	RESIDUA	4.	1.00	0.048	0.04	20.2	1.50	0.64	1.06	11.19	0.	0.	14.38	1.293	-9.	-58		0	
28693 DEHTM	RESIDUA	4.	19.57	0.345	0.04	56.8	4.20	1.79	2.18	21.13	0.	-12.20	17.10	1.538	-34.	0		65	
28693 DESQA3	DISTILL	4.	1.00	0.027	0.04	19.1	1.41	0.60	1.00	14.01	0.	0.	17.02	1.531	-16.	-73		0	
28693 DESQA3	DISTILL	4.	54.14	0.248	0.04	159.8	11.84	5.03	4.87	64.90	0.	-34.91	51.74	4.652	-191.	0		60	
28693 DESQA3	RESIDUA	4.	1.00	0.027	0.04	19.1	1.41	0.60	1.00	11.43	0.	0.	14.44	1.299	-8.	-45		0	
28693 DESQA3	RESIDUA	4.	54.14	0.248	0.04	159.8	11.84	5.03	4.87	52.95	0.	-34.91	39.78	3.577	-154.	0		63	
28693 GTSQAD	DISTILL	4.	1.00	0.047	0.04	16.7	1.23	0.52	0.92	13.73	0.	0.	16.41	1.475	-13.	-46		0	
28693 GTSQAD	DISTILL	4.	16.26	0.312	0.04	23.6	1.75	0.74	1.17	24.09	0.	-10.02	17.73	1.594	-21.	0		55	
28693 GTRA08	DISTILL	4.	1.00	0.043	0.04	17.4	1.29	0.55	0.93	13.79	0.	0.	16.53	1.489	-14.	-52		0	
28693 GTRA08	DISTILL	4.	27.23	0.338	0.04	40.7	3.01	1.28	1.64	33.00	0.	-17.23	21.71	1.952	-41.	0		57	
28693 GTRA12	DISTILL	4.	1.00	0.044	0.04	17.4	1.29	0.55	0.92	13.77	0.	0.	16.53	1.487	-14.	-51		0	

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100										
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																				
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD	REVENUE TOTAL		NORML	PRESNT	ROI	GROSS		ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD	REVENUE TOTAL		NORML	PRESNT	ROI	GROSS		
SYSTEM	FUEL	REQD	GEN/	/HEAT COST						SYSTEM	FUEL	REQD	GEN/	/HEAT COST						
		NW	REQD	RATIO *10**6		INSNC	ELEC										WORTH 15%	%	PAY BACK	
28693 GTRA12 DISTILL	4.	26.52	0.345	0.04	38.8	2.88	1.22	1.59	32.05	0.	-16.76	20.99	1.887	-38.	0	57				
28693 GTRA16 DISTILL	4.	1.00	0.044	0.04	17.6	1.30	0.55	0.93	13.77	0.	0.	16.55	1.488	-14.	-52	0				
28693 GTRA16 DISTILL	4.	24.70	0.341	0.04	39.0	2.89	1.23	1.59	30.62	0.	-15.57	20.76	1.867	-38.	0	57				
28693 GTR208 DISTILL	4.	1.00	0.044	0.04	17.2	1.27	0.54	0.92	13.77	0.	0.	16.51	1.484	-14.	-50	0				
28693 GTR208 DISTILL	4.	20.41	0.321	0.04	30.8	2.28	0.97	1.37	27.60	0.	-12.75	19.47	1.750	-30.	0	56				
28693 GTR212 DISTILL	4.	1.00	0.044	0.04	17.3	1.28	0.54	0.93	13.77	0.	0.	16.52	1.486	-14.	-50	0				
28693 GTR212 DISTILL	4.	21.89	0.327	0.04	33.1	2.45	1.04	1.43	28.70	0.	-13.72	19.90	1.790	-32.	0	57				
28693 GTR216 DISTILL	4.	1.00	0.045	0.04	17.4	1.29	0.55	0.93	13.76	0.	0.	16.52	1.485	-14.	-51	0				
28693 GTR216 DISTILL	4.	22.44	0.336	0.04	35.3	2.61	1.11	1.49	28.82	0.	-14.09	19.95	1.794	-33.	0	57				
28693 GTRW08 DISTILL	4.	1.00	0.036	0.04	17.5	1.30	0.55	0.93	13.89	0.	0.	16.67	1.499	-15.	-53	0				
28693 GTRW08 DISTILL	4.	32.45	0.297	0.04	40.5	3.00	1.27	1.67	40.01	0.	-20.66	25.29	2.275	-52.	0	57				
28693 GTRW12 DISTILL	4.	1.00	0.039	0.04	17.5	1.30	0.55	0.93	13.85	0.	0.	16.63	1.495	-15.	-53	0				
28693 GTRW12 DISTILL	4.	32.93	0.320	0.04	40.7	3.02	1.28	1.68	39.15	0.	-20.97	24.15	2.171	-49.	0	57				
28693 GTRW16 DISTILL	4.	1.00	0.039	0.04	17.7	1.31	0.56	0.93	13.84	0.	0.	16.64	1.496	-15.	-54	0				
28693 GTRW16 DISTILL	4.	30.46	0.319	0.04	40.2	2.98	1.27	1.65	36.92	0.	-19.35	23.47	2.111	-47.	0	57				
28693 GTR308 DISTILL	4.	1.00	0.034	0.04	17.2	1.28	0.54	0.93	13.92	0.	0.	16.67	1.499	-15.	-51	0				
28693 GTR308 DISTILL	4.	24.78	0.257	0.04	33.6	2.49	1.06	1.48	34.59	0.	-15.62	24.00	2.158	-45.	0	56				
28693 GTR312 DISTILL	4.	1.00	0.040	0.04	17.3	1.28	0.55	0.93	13.83	0.	0.	16.58	1.491	-14.	-51	0				
28693 GTR312 DISTILL	4.	26.46	0.314	0.04	34.4	2.55	1.08	1.49	33.48	0.	-16.72	21.88	1.968	-39.	0	57				
28693 GTR316 DISTILL	4.	1.00	0.040	0.04	17.5	1.30	0.55	0.93	13.83	0.	0.	16.61	1.493	-14.	-52	0				
28693 GTR316 DISTILL	4.	26.05	0.311	0.04	35.4	2.62	1.11	1.51	33.25	0.	-16.45	22.05	1.983	-40.	0	57				
28693 FCPADS DISTILL	4.	1.00	0.031	0.04	18.4	1.36	0.58	1.20	13.97	0.	0.	17.10	1.538	-16.	-63	0				
28693 FCPADS DISTILL	4.	57.32	0.279	0.04	121.2	8.98	3.82	21.59	65.28	0.	-36.99	62.67	5.635	-210.	0	59				
28693 FCMCDS DISTILL	4.	1.00	0.041	0.04	18.5	1.37	0.58	1.17	13.82	0.	0.	16.95	1.524	-16.	-65	0				
28693 FCMCDS DISTILL	4.	45.35	0.360	0.04	104.5	7.74	3.29	16.25	47.63	0.	-29.13	45.76	4.117	-149.	0	60				
28694 ONUCGN COAL-FG	3.	0.	0.	0.03	24.8	1.88	0.80	1.50	6.68	1.00	0.	11.86	1.000	0.	0	0				
28694 STM141 RESIDUA	3.	1.00	0.050	0.03	14.7	1.12	0.47	1.03	11.88	0.	0.	14.50	1.223	-3.	-20	0				
28694 STM141 RESIDUA	3.	3.49	0.146	0.03	15.0	1.14	0.49	0.86	12.82	0.	-1.50	13.81	1.165	-1.	-17	0				
28694 STM141 COAL-FG	3.	1.00	0.050	0.03	31.6	2.40	1.02	2.11	6.90	0.	0.	12.42	1.048	-5.	0	999				
28694 STM141 COAL-FG	3.	3.49	0.146	0.03	29.1	2.21	0.94	1.78	7.45	0.	-1.50	10.87	0.917	1.	18	5				
28694 STM141 COAL-AF	3.	1.00	0.050	0.03	28.8	2.18	0.93	2.01	6.90	0.	0.	12.02	1.013	-2.	1	24				
28694 STM141 COAL-AF	3.	3.49	0.146	0.03	20.3	1.54	0.65	1.59	7.45	0.	-1.50	9.73	0.821	9.	999	0				
28694 PFBSTM COAL-PF	3.	1.00	0.048	0.03	30.2	2.29	0.97	2.07	6.91	0.	0.	12.24	1.033	-4.	0	999				
28694 PFBSTM COAL-PF	3.	7.81	0.242	0.03	35.3	2.68	1.14	2.76	8.54	0.	-4.10	11.02	0.929	-3.	10	9				
28694 TISTMT RESIDUA	3.	1.00	0.049	0.03	26.8	2.03	0.86	1.28	11.89	0.	0.	16.06	1.355	-14.	0	56				
28694 TISTMT RESIDUA	3.	9.55	0.279	0.03	80.8	6.13	2.61	2.73	15.26	0.	-5.15	21.59	1.820	-57.	0	66				
28694 TISTNT COAL	3.	1.00	0.049	0.03	39.9	3.02	1.29	2.23	6.90	0.	0.	13.45	1.134	-12.	0	116				
28694 TISTMT COAL	3.	11.24	0.304	0.03	112.6	8.55	3.63	3.95	9.25	0.	-6.16	19.21	1.620	-65.	0	999				
28694 TIHRSG RESIDUA	3.	1.00	0.029	0.03	30.3	2.25	0.95	1.30	12.14	0.	0.	16.65	1.404	-17.	0	56				
28694 TIHRSG RESIDUA	3.	6.96	0.136	0.03	81.1	6.00	2.55	2.61	16.01	0.	-3.59	23.59	1.989	-63.	0	62				
28694 TIHRSG COAL	3.	1.00	0.029	0.03	44.4	3.37	1.43	2.29	7.05	0.	0.	14.14	1.193	-17.	0	89				
28694 TIHRSG COAL	3.	8.19	0.150	0.03	113.8	8.63	3.67	3.89	9.76	0.	-4.33	21.62	1.823	-73.	0	93				
28694 STIRL DISTILL	3.	1.00	0.034	0.03	19.5	1.45	0.62	1.04	14.81	0.	0.	17.91	1.511	-16.	-56	0				
28694 STIRL DISTILL	3.	13.70	0.231	0.03	38.9	2.88	1.22	1.66	23.89	0.	-7.65	22.01	1.856	-38.	0	57				

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY SYSTEM	CONV	SITE- FUEL	POWER REQD MW	POWER GEN/ REQD	FESRPOWER /HEAT COST RATIO *10**6	CAPITAL COST	CAPITAL TAXES	LANDM	FUEL	PURCHD ELEC	REVNU	TOTAL	NORML	PRESNT WORTH 15%	ROI %	GROSS PAY BACK			
28694	STIRL	RESIDUA	3.	1.00	0.034	0.03	19.5	1.45	0.62	1.04	12.08	0.	0.	15.18	1.281	-8.	-35	0	0
28694	STIRL	RESIDUA	3.	13.70	0.231	0.03	38.9	2.88	1.23	1.66	19.49	0.	-7.65	17.62	1.486	-24.	0	58	0
28694	STIRL	COAL	3.	1.00	0.034	0.03	31.2	2.31	0.98	1.94	7.01	0.	0.	12.25	1.033	-4.	0	999	0
28694	STIRL	COAL	3.	16.12	0.248	0.03	73.5	5.45	2.31	3.09	12.14	0.	-9.10	13.89	1.171	-29.	0	26	0
28694	HEGT00	COAL-AF	3.	1.00	0.003	0.03	33.6	2.55	1.08	1.91	7.24	0.	0.	12.79	1.078	-7.	0	113	0
28694	HEGT00	COAL-AF	3.	49.08	0.030	0.03	181.3	13.76	5.85	7.19	34.43	0.	-28.95	32.28	2.723	-139.	0	77	0
28694	HEGT00	COAL-AF	3.	1.00	0.015	0.03	33.2	2.52	1.07	1.92	7.15	0.	0.	12.66	1.068	-7.	0	203	0
28694	HEGT00	COAL-AF	3.	13.35	0.099	0.03	75.1	5.70	2.42	3.15	13.07	0.	-7.43	16.92	1.426	-40.	0	122	0
28694	FCMCCL	COAL	3.	1.00	0.119	0.03	36.3	2.82	1.20	2.04	8.13	0.	0.	14.19	1.197	-13.	0	65	0
28694	FCMCCL	COAL	3.	22.93	0.296	0.03	87.8	6.82	2.90	4.78	14.17	0.	-13.20	15.47	1.305	-43.	0	999	0
28694	FCSTCL	COAL	3.	1.00	0.118	0.03	36.0	2.80	1.19	2.09	8.12	0.	0.	14.20	1.197	-13.	0	65	0
28694	FCSTCL	COAL	3.	23.51	0.340	0.03	97.0	7.54	3.20	5.35	15.44	0.	-16.57	14.97	1.262	-46.	1	25	0
28694	IGGTST	COAL	3.	1.00	0.129	0.03	35.0	2.72	1.16	2.07	8.20	0.	0.	14.15	1.193	-13.	0	54	0
28694	IGGTST	COAL	3.	18.75	0.183	0.03	74.2	5.77	2.45	2.69	14.36	0.	-10.69	14.59	1.231	-33.	0	999	0
28694	GTSOAR	RESIDUA	3.	1.00	0.033	0.03	18.3	1.36	0.58	0.97	12.10	0.	0.	15.00	1.265	-6.	-29	0	0
28694	GTSOAR	RESIDUA	3.	22.28	0.269	0.03	34.5	2.55	1.09	1.51	24.86	0.	-12.81	17.19	1.450	-21.	0	57	0
28694	GTAC08	RESIDUA	3.	1.00	0.043	0.03	17.9	1.32	0.56	0.96	11.97	0.	0.	14.81	1.249	-6.	-27	0	0
28694	GTAC08	RESIDUA	3.	15.80	0.311	0.03	24.5	1.82	0.77	1.22	18.94	0.	-8.91	13.83	1.167	-6.	106	0	0
28694	GTAC12	RESIDUA	3.	1.00	0.042	0.03	17.8	1.32	0.56	0.95	11.98	0.	0.	14.82	1.249	-6.	-27	0	0
28694	GTAC12	RESIDUA	3.	19.90	0.332	0.03	28.8	2.14	0.91	1.34	21.11	0.	-11.38	14.12	1.191	-9.	0	57	0
28694	GTAC16	RESIDUA	3.	1.00	0.041	0.03	17.9	1.33	0.56	0.95	12.00	0.	0.	14.85	1.252	-6.	-27	0	0
28694	GTAC16	RESIDUA	3.	23.06	0.336	0.03	33.0	2.45	1.04	1.46	23.11	0.	-13.28	14.77	1.246	-13.	0	58	0
28694	GTWC16	RESIDUA	3.	1.00	0.036	0.03	18.2	1.35	0.57	0.96	12.03	0.	0.	14.92	1.258	-6.	-28	0	0
28694	GTWC16	RESIDUA	3.	23.46	0.316	0.03	31.4	2.32	0.99	1.43	24.10	0.	-13.52	15.32	1.292	-14.	0	57	0
28694	GTWC16	RESIDUA	3.	1.00	0.036	0.03	21.8	1.62	0.69	1.12	12.06	0.	0.	15.47	1.305	-10.	-54	0	0
28694	DEHTPM	RESIDUA	3.	20.14	0.286	0.03	62.3	4.62	1.96	2.36	22.76	0.	-11.52	20.18	1.702	-43.	0	62	0
28694	GTSCAD	DISTILL	3.	1.00	0.040	0.03	17.7	1.31	0.56	0.95	14.72	0.	0.	17.54	1.480	-14.	-43	0	0
28694	GTSCAD	DISTILL	3.	19.41	0.309	0.03	25.0	1.92	0.81	1.27	26.37	0.	-11.09	19.29	1.627	-23.	0	56	0
28694	GTRA08	DISTILL	3.	1.00	0.033	0.03	18.4	1.37	0.58	0.96	14.82	0.	0.	17.73	1.495	-15.	-48	0	0
28694	GTRA08	DISTILL	3.	37.10	0.314	0.03	47.9	3.54	1.51	1.89	41.23	0.	-21.74	26.43	2.229	-56.	0	57	0
28694	GTRA12	DISTILL	3.	1.00	0.035	0.03	18.3	1.36	0.58	0.96	14.80	0.	0.	17.69	1.492	-15.	-47	0	0
28694	GTRA12	DISTILL	3.	35.08	0.325	0.03	47.4	3.51	1.49	1.87	38.87	0.	-20.52	25.23	2.127	-52.	0	57	0
28694	GTRA16	DISTILL	3.	1.00	0.035	0.03	18.5	1.37	0.58	0.97	14.79	0.	0.	17.71	1.493	-15.	-48	0	0
28694	GTRA16	DISTILL	3.	31.96	0.324	0.03	46.9	3.47	1.48	1.85	36.33	0.	-18.64	24.48	2.065	-50.	0	57	0
28694	GTR208	DISTILL	3.	1.00	0.036	0.03	18.2	1.35	0.57	0.96	14.78	0.	0.	17.66	1.489	-15.	-46	0	0
28694	GTR208	DISTILL	3.	25.56	0.303	0.03	36.8	2.72	1.16	1.57	31.69	0.	-14.79	22.36	1.885	-38.	0	57	0
28694	GTR212	DISTILL	3.	1.00	0.036	0.03	18.3	1.35	0.58	0.96	14.78	0.	0.	17.67	1.490	-15.	-46	0	0
28694	GTR212	DISTILL	3.	27.44	0.314	0.03	39.4	2.91	1.24	1.64	32.99	0.	-15.92	22.86	1.928	-41.	0	57	0
28694	GTR216	DISTILL	3.	1.00	0.037	0.03	18.3	1.36	0.58	0.96	14.77	0.	0.	17.67	1.490	-15.	-47	0	0
28694	GTR216	DISTILL	3.	28.26	0.323	0.03	42.0	3.11	1.32	1.71	33.26	0.	-16.41	23.00	1.939	-43.	0	57	0
28694	GTRW08	DISTILL	3.	1.00	0.028	0.03	18.5	1.37	0.58	0.97	14.90	0.	0.	17.81	1.502	-15.	-48	0	0
28694	GTRW08	DISTILL	3.	43.47	0.277	0.03	49.3	3.65	1.55	1.96	49.12	0.	-25.57	30.72	2.590	-70.	0	57	0
28694	GTRW12	DISTILL	3.	1.00	0.031	0.03	18.5	1.37	0.58	0.96	14.85	0.	0.	17.77	1.493	-15.	-48	0	0
28694	GTRW12	DISTILL	3.	42.93	0.305	0.03	48.8	3.61	1.54	1.94	46.78	0.	-25.24	28.62	2.414	-63.	0	57	0

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SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC		ELEC					WORTH 15%	% PAY BACK						
20694 GTRW16 DISTILL	3.	1.00	0.032	0.03	18.6	1.38	0.59	0.97	14.84	0.	0.	17.77	1.499	-15.	-49	0			
28694 GTRW16 DISTILL	3.	38.72	0.307	0.03	47.5	3.52	1.50	1.89	43.03	0.	-22.71	27.22	2.296	-58.	0	57			
28694 GTR308 DISTILL	3.	1.00	0.026	0.03	18.2	1.35	0.57	0.96	14.94	0.	0.	17.82	1.503	-15.	-47	0			
28694 GTR308 DISTILL	3.	32.45	0.236	0.03	38.6	2.86	1.22	1.67	41.52	0.	-18.93	28.33	2.389	-58.	0	56			
28694 GTR312 DISTILL	3.	1.00	0.034	0.03	18.3	1.36	0.58	0.96	14.82	0.	0.	17.71	1.494	-15.	-47	0			
28694 GTR312 DISTILL	3.	32.36	0.308	0.03	40.1	2.97	1.26	1.68	37.53	0.	-18.88	24.57	2.072	-47.	0	57			
28694 GTR316 DISTILL	3.	1.00	0.033	0.03	18.5	1.37	0.58	0.97	14.82	0.	0.	17.73	1.496	-15.	-48	0			
28694 GTR316 DISTILL	3.	31.80	0.305	0.03	41.1	3.05	1.30	1.71	37.21	0.	-18.54	24.72	2.084	-48.	0	57			
28694 FCPADS DISTILL	3.	1.00	0.026	0.03	19.6	1.45	0.62	1.21	14.93	0.	0.	18.21	1.536	-17.	-59	0			
28694 FCPADS DISTILL	3.	67.50	0.279	0.03	131.4	9.73	4.14	23.32	70.46	0.	-40.04	67.61	5.701	-227.	0	59			
28694 FCHCDS DISTILL	3.	1.00	0.035	0.03	19.7	1.46	0.62	1.19	14.79	0.	0.	18.07	1.524	-17.	-59	0			
28694 FCHCDS DISTILL	3.	53.39	0.360	0.03	113.4	8.40	3.57	17.56	51.41	0.	-31.55	49.38	4.165	-161.	0	60			
28731 ONOCGN COAL-FG	4.	0.	0.	0.02	42.0	3.19	1.36	2.22	13.36	1.13	0.	21.26	1.000	0.	0	0			
28731 PFBSTM COAL-PF	4.	1.00	0.026	0.02	40.2	3.05	1.30	2.77	13.66	0.	0.	20.78	0.978	2.	999	0			
28731 PFBSTM COAL-PF	4.	6.36	0.132	0.02	42.3	3.21	1.37	3.72	15.25	0.	-3.64	19.92	0.937	4.	178	1			
28731 TIHRSG RESIDUA	4.	1.00	0.009	0.02	34.9	2.58	1.10	1.49	23.94	0.	0.	29.11	1.369	-21.	-53	0			
28731 TIHRSG RESIDUA	4.	13.87	0.073	0.02	138.6	10.26	4.36	3.96	35.98	0.	-8.74	45.83	2.156	-122.	0	61			
28731 TIHRSG COAL	4.	1.00	0.009	0.02	61.6	4.67	1.99	3.03	13.90	0.	0.	23.59	1.110	-17.	0	86			
28731 TIHRSG COAL	4.	13.87	0.073	0.02	176.4	13.38	5.69	5.95	20.89	0.	-8.74	37.18	1.749	-114.	0	84			
28731 HEGT00 COAL-AF	4.	1.00	0.006	0.02	49.7	3.77	1.60	2.64	13.93	0.	0.	21.94	1.032	-6.	0	999			
28731 HEGT00 COAL-AF	4.	21.13	0.070	0.02	108.4	8.23	3.50	4.71	25.44	0.	-13.67	28.21	1.327	-54.	0	110			
28731 FCMCCL COAL	4.	1.00	0.025	0.02	55.5	4.31	1.83	2.83	13.67	0.	0.	22.65	1.066	-12.	0	207			
28731 FCMCCL COAL	4.	34.90	0.333	0.02	124.5	9.68	4.11	7.25	24.33	0.	-23.02	22.35	1.052	-45.	4	16			
28731 GTSOAR RESIDUA	4.	1.00	0.016	0.02	26.6	1.98	0.84	1.25	23.77	0.	0.	27.84	1.310	-13.	-27	0			
28731 GTSOAR RESIDUA	4.	45.96	0.233	0.02	63.6	4.71	2.00	2.18	57.83	0.	-30.53	36.20	1.703	-56.	0	57			
28731 GTAC08 RESIDUA	4.	1.00	0.025	0.02	26.3	1.95	0.83	1.24	23.55	0.	0.	27.56	1.296	-12.	-26	0			
28731 GTAC08 RESIDUA	4.	28.23	0.309	0.02	38.4	2.84	1.21	1.47	38.16	0.	-18.49	25.19	1.185	-10.	-47	0			
28731 GTAC12 RESIDUA	4.	1.00	0.025	0.02	26.3	1.94	0.83	1.23	23.54	0.	0.	27.54	1.296	-12.	-26	0			
28731 GTAC12 RESIDUA	4.	34.79	0.336	0.02	45.5	3.37	1.43	1.66	41.62	0.	-22.94	25.15	1.183	-13.	0	56			
28731 GTAC16 RESIDUA	4.	1.00	0.023	0.02	26.4	1.95	0.83	1.23	23.59	0.	0.	27.60	1.298	-12.	-26	0			
28731 GTAC16 RESIDUA	4.	41.71	0.332	0.02	57.6	4.27	1.81	1.99	47.12	0.	-27.64	27.55	1.296	-26.	0	58			
28731 GTWC16 RESIDUA	4.	1.00	0.022	0.02	26.6	1.97	0.84	1.24	23.61	0.	0.	27.66	1.301	-12.	-27	0			
28731 GTWC16 RESIDUA	4.	41.56	0.316	0.02	48.6	3.60	1.53	1.77	48.17	0.	-27.55	27.51	1.294	-22.	0	56			
28731 GTSOAD DISTILL	4.	1.00	0.023	0.02	26.1	1.93	0.82	1.23	28.92	0.	0.	32.90	1.548	-28.	-41	0			
28731 GTSOAD DISTILL	4.	34.40	0.309	0.02	43.3	3.21	1.36	1.61	52.70	0.	-22.68	36.21	1.703	-47.	0	55			
28731 GTRA08 DISTILL	4.	1.00	0.015	0.02	26.8	1.98	0.84	1.24	29.16	0.	0.	33.23	1.563	-30.	-43	0			
28731 GTRA08 DISTILL	4.	94.49	0.261	0.02	114.8	8.50	3.61	3.58	118.41	0.	-63.48	70.62	3.322	-188.	0	57			
28731 GTRA12 DISTILL	4.	1.00	0.017	0.02	26.8	1.98	0.84	1.24	29.11	0.	0.	33.17	1.560	-30.	-43	0			
28731 GTRA12 DISTILL	4.	81.23	0.284	0.02	104.7	7.75	3.30	3.29	101.50	0.	-54.48	61.36	2.887	-154.	0	57			
28731 GTRA16 DISTILL	4.	1.00	0.018	0.02	27.0	2.00	0.85	1.24	29.08	0.	0.	33.17	1.560	-30.	-43	0			
28731 GTRA16 DISTILL	4.	69.39	0.290	0.02	93.3	6.91	2.94	2.97	88.94	0.	-46.43	55.32	2.603	-130.	0	57			
28731 GTR208 DISTILL	4.	1.00	0.019	0.02	26.6	1.97	0.84	1.24	29.05	0.	0.	33.10	1.557	-29.	-42	0			
28731 GTR208 DISTILL	4.	50.73	0.265	0.02	66.8	4.95	2.10	2.26	70.91	0.	-33.76	46.46	2.186	-90.	0	56			
28731 GTR212 DISTILL	4.	1.00	0.019	0.02	26.7	1.98	0.84	1.24	29.05	0.	0.	33.11	1.557	-29.	-42	0			

DATE 06/07/79
I&SE-PEO-ADV-ENERGY-SYS

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY
REPORT 5.4

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC								WORTH 15%	%	PAY BACK			
28731 GTR212 DISTILL	4.	54.78	0.291	0.02	72.4	5.36	2.28	2.41	74.26	0.	-36.52	47.80	2.249	-97.	0	57			
28731 GTR216 DISTILL	4.	1.00	0.019	0.02	26.8	1.98	0.84	1.24	29.04	0.	0.	33.11	1.557	-29.	-42	0			
28731 GTR216 DISTILL	4.	57.03	0.299	0.02	78.6	5.82	2.47	2.57	75.70	0.	-36.04	48.52	2.283	-102.	0	57			
28731 GTRW08 DISTILL	4.	1.00	0.013	0.02	26.9	1.99	0.85	1.24	29.21	0.	0.	33.29	1.566	-30.	-43	0			
28731 GTRW08 DISTILL	4.	104.61	0.236	0.02	112.8	8.35	3.55	3.56	133.32	0.	-70.35	78.44	3.690	-212.	0	57			
28731 GTRW12 DISTILL	4.	1.00	0.016	0.02	26.9	1.99	0.85	1.24	29.14	0.	0.	33.22	1.563	-30.	-43	0			
28731 GTRW12 DISTILL	4.	95.23	0.275	0.02	97.9	7.25	3.08	3.16	117.03	0.	-63.98	66.54	3.130	-168.	0	57			
28731 GTRW16 DISTILL	4.	1.00	0.017	0.02	27.1	2.01	0.85	1.24	29.11	0.	0.	33.21	1.562	-30.	-44	0			
28731 GTRW16 DISTILL	4.	80.12	0.284	0.02	91.0	6.74	2.86	2.94	100.39	0.	-53.72	59.21	2.786	-141.	0	57			
28731 GTR308 DISTILL	4.	1.00	0.012	0.02	26.6	1.97	0.84	1.24	29.24	0.	0.	33.28	1.566	-30.	-43	0			
28731 GTR308 DISTILL	4.	68.81	0.202	0.02	75.8	5.61	2.39	2.56	99.29	0.	-46.04	63.81	3.002	-149.	0	56			
28731 GTR312 DISTILL	4.	1.00	0.019	0.02	26.8	1.98	0.84	1.24	29.05	0.	0.	33.11	1.553	-29.	-42	0			
28731 GTR312 DISTILL	4.	60.79	0.297	0.02	70.9	5.25	2.23	2.39	79.52	0.	-40.60	48.79	2.296	-99.	0	56			
28731 GTR316 DISTILL	4.	1.00	0.019	0.02	26.9	2.00	0.85	1.24	29.05	0.	0.	33.14	1.559	-30.	-43	0			
28731 GTR316 DISTILL	4.	59.47	0.295	0.02	72.8	5.39	2.29	2.43	78.48	0.	-39.70	48.89	2.300	-100.	0	57			
28731 FCPADS DISTILL	4.	1.00	0.015	0.02	28.9	2.14	0.91	1.55	29.15	0.	0.	33.75	1.588	-32.	-50	0			
28731 FCPADS DISTILL	4.	119.79	0.279	0.02	237.6	17.60	7.48	45.41	141.02	0.	-80.66	130.85	6.156	-440.	0	59			
28731 FCHCDS DISTILL	4.	1.00	0.021	0.02	29.1	2.15	0.92	1.52	28.99	0.	0.	33.58	1.580	-32.	-50	0			
28731 FCHCDS DISTILL	4.	94.76	0.360	0.02	204.4	15.14	6.44	33.97	102.89	0.	-63.67	94.77	4.459	-310.	0	60			
28741 ONOCGN COAL-AF	4.	0.	0.	0.15	7.4	0.56	0.24	0.66	1.81	1.22	0.	4.48	1.000	0.	0	0			
28741 STM141 RESIDUA	4.	1.00	0.176	0.15	6.7	0.51	0.22	0.62	3.57	0.	0.	4.91	1.096	-1.	-38	0			
28741 STM141 RESIDUA	4.	1.72	0.252	0.15	6.6	0.50	0.21	0.49	3.90	0.	-0.52	4.58	1.022	0.	-13	0			
28741 STM141 COAL-FG	4.	1.00	0.176	0.15	13.7	1.04	0.44	1.11	2.07	0.	0.	4.67	1.042	-4.	2	20			
28741 STM141 COAL-FG	4.	1.72	0.252	0.15	12.4	0.94	0.40	0.88	2.27	0.	-0.52	3.97	0.885	-1.	12	8			
28741 STM141 COAL-AF	4.	1.00	0.176	0.15	12.3	0.93	0.40	1.03	2.07	0.	0.	4.43	0.989	-2.	6	13			
28741 STM141 COAL-AF	4.	1.72	0.252	0.15	9.9	0.75	0.32	0.78	2.27	0.	-0.52	3.59	0.800	2.	25	4			
28741 STM088 RESIDUA	4.	1.00	0.176	0.15	6.2	0.47	0.20	0.60	3.57	0.	0.	4.84	1.081	-1.	-23	0			
28741 STM088 RESIDUA	4.	1.32	0.213	0.15	5.8	0.44	0.19	0.46	3.72	0.	-0.23	4.58	1.022	0.	-9	0			
28741 STM088 COAL-FG	4.	1.00	0.176	0.15	13.0	0.99	0.42	1.07	2.07	0.	0.	4.55	1.016	-3.	4	16			
28741 STM088 COAL-FG	4.	1.32	0.213	0.15	11.4	0.87	0.37	0.84	2.16	0.	-0.23	4.00	0.893	-0.	12	7			
28741 STM088 COAL-AF	4.	1.00	0.176	0.15	11.4	0.87	0.37	1.00	2.07	0.	0.	4.30	0.961	-1.	8	10			
28741 STM088 COAL-AF	4.	1.32	0.213	0.15	9.3	0.71	0.30	0.75	2.16	0.	-0.23	3.68	0.822	2.	27	4			
28741 PFBSTH COAL-PF	4.	1.00	0.174	0.15	14.8	1.12	0.48	1.17	2.06	0.	0.	4.85	1.082	-5.	0	29			
28741 PFBSTH COAL-PF	4.	2.61	0.312	0.15	15.5	1.18	0.50	1.13	2.52	0.	-1.18	4.15	0.927	-3.	8	10			
28741 TISTMT RESIDUA	4.	1.00	0.174	0.15	16.2	1.23	0.52	0.85	3.58	0.	0.	6.19	1.382	-10.	0	64			
28741 TISTMT RESIDUA	4.	3.41	0.352	0.15	33.7	2.56	1.09	1.19	4.72	0.	-1.76	7.80	1.741	-23.	0	77			
28741 TISTMT COAL	4.	1.00	0.174	0.15	24.3	1.84	0.78	1.37	2.08	0.	0.	6.08	1.357	-13.	0	208			
28741 TISTMT COAL	4.	3.41	0.352	0.15	42.8	3.25	1.38	1.68	2.74	0.	-1.76	7.29	1.628	-26.	0	999			
28741 TIHRSG RESIDUA	4.	1.00	0.131	0.15	23.0	1.70	0.72	0.94	3.77	0.	0.	7.13	1.590	-15.	0	65			
28741 TIHRSG RESIDUA	4.	1.46	0.170	0.15	28.3	2.10	0.89	0.94	4.07	0.	-0.34	7.66	1.711	-20.	0	67			
28741 TIHRSG COAL	4.	1.00	0.131	0.15	31.7	2.41	1.02	1.46	2.19	0.	0.	7.08	1.580	-20.	0	102			
28741 TIHRSG COAL	4.	1.46	0.170	0.15	36.5	2.77	1.18	1.38	2.36	0.	-0.34	7.36	1.642	-23.	0	123			
28741 STIRL DISTILL	4.	1.00	0.126	0.15	6.7	0.50	0.21	0.57	4.65	0.	0.	5.93	1.323	-4.	-89	0			
28741 STIRL DISTILL	4.	3.63	0.262	0.15	10.9	0.81	0.34	0.59	6.84	0.	-1.92	6.66	1.487	-8.	0	57			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100							
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																	
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS		
SYSTEM	FUEL	REQD	GEN/	REQD	/HEAT COST												
		MW	REQD		RATIO *10**6				ELEC								
28741	STIRL	RESIDUA	4.	1.00	0.126	0.15	6.7	0.50	0.21	0.57	3.79	0.	0.	5.07	1.132	-1.	
28741	STIRL	RESIDUA	4.	3.63	0.262	0.15	11.0	0.81	0.34	0.59	5.58	0.	-1.92	5.40	1.206	-4.	
28741	STIRL	COAL	4.	1.00	0.126	0.15	13.7	1.02	0.43	1.05	2.20	0.	0.	4.70	1.049	-4.	
28741	STIRL	COAL	4.	3.63	0.262	0.15	18.6	1.38	0.59	1.05	3.24	0.	-1.92	4.33	0.968	-5.	
28741	HEGT85	COAL-AF	4.	1.00	0.047	0.15	21.6	1.64	0.70	1.17	2.40	0.	0.	5.90	1.318	-11.	
28741	HEGT85	COAL-AF	4.	15.71	0.142	0.15	93.6	7.10	3.02	3.40	11.15	0.	-10.74	13.94	3.111	-71.	
28741	HEGT60	COAL-AF	4.	1.00	0.058	0.15	20.9	1.59	0.68	1.16	2.37	0.	0.	5.79	1.293	-11.	
26741	HEGT60	COAL-AF	4.	5.77	0.142	0.15	45.8	3.48	1.48	1.76	5.07	0.	-3.48	8.31	1.855	-30.	
28741	HEGT00	COAL-AF	4.	1.00	0.066	0.15	19.9	1.51	0.64	1.13	2.35	0.	0.	5.63	1.256	-10.	
28741	HEGT00	COAL-AF	4.	2.41	0.114	0.15	25.7	1.95	0.83	1.10	3.12	0.	-1.03	5.97	1.332	-13.	
28741	FCMCCL	COAL	4.	1.00	0.151	0.15	19.2	1.49	0.63	1.18	2.14	0.	0.	5.44	1.215	-9.	
28741	FCMCCL	COAL	4.	4.33	0.337	0.15	30.4	2.36	1.00	1.56	3.24	0.	-2.43	5.74	1.281	-15.	
28741	FCSTCL	COAL	4.	1.00	0.157	0.15	18.6	1.45	0.61	1.21	2.12	0.	0.	5.40	1.204	-9.	
28741	FCSTCL	COAL	4.	7.11	0.410	0.15	38.0	2.96	1.26	2.00	4.05	0.	-4.46	5.80	1.295	-19.	
28741	IGGTST	COAL	4.	1.00	0.127	0.15	18.8	1.47	0.62	1.22	2.20	0.	0.	5.50	1.228	-9.	
28741	IGGTST	COAL	4.	5.03	0.253	0.15	31.2	2.42	1.03	1.34	3.77	0.	-2.94	5.63	1.256	-15.	
28741	GTSGAR	RESIDUA	4.	1.00	0.128	0.15	6.9	0.51	0.22	0.54	3.78	0.	0.	5.06	1.129	-2.	
28741	GTSGAR	RESIDUA	4.	4.57	0.291	0.15	10.7	0.80	0.34	0.54	6.18	0.	-2.60	5.25	1.171	-4.	
28741	GTAC08	RESIDUA	4.	1.00	0.150	0.15	6.4	0.47	0.20	0.53	3.68	0.	0.	4.89	1.091	-1.	
28741	GTAC08	RESIDUA	4.	3.54	0.310	0.15	8.3	0.61	0.26	0.46	5.14	0.	-1.85	4.62	1.031	-1.	
28741	GTAC12	RESIDUA	4.	1.00	0.148	0.15	6.4	0.47	0.20	0.53	3.69	0.	0.	4.90	1.093	-1.	
28741	GTAC12	RESIDUA	4.	4.42	0.333	0.15	9.5	0.71	0.30	0.50	5.69	0.	-2.50	4.70	1.048	-2.	
28741	GTAC16	RESIDUA	4.	1.00	0.146	0.15	6.5	0.48	0.21	0.53	3.70	0.	0.	4.92	1.099	-1.	
28741	GTAC16	RESIDUA	4.	5.02	0.342	0.15	10.8	0.80	0.34	0.54	6.09	0.	-2.93	4.84	1.080	-3.	
28741	GTAC16	RESIDUA	4.	1.00	0.132	0.15	6.8	0.51	0.21	0.54	3.76	0.	0.	5.02	1.121	-1.	
28741	GTAC16	RESIDUA	4.	5.25	0.315	0.15	11.2	0.83	0.35	0.55	6.54	0.	-3.10	5.17	1.153	-4.	
28741	CC1626	RESIDUA	4.	1.00	0.132	0.15	6.9	0.52	0.22	0.61	3.76	0.	0.	5.12	1.143	-2.	
28741	CC1626	RESIDUA	4.	8.88	0.363	0.15	15.7	1.19	0.51	0.81	8.91	0.	-5.75	5.68	1.267	-8.	
28741	CC1622	RESIDUA	4.	1.00	0.138	0.15	6.7	0.51	0.22	0.60	3.74	0.	0.	5.06	1.130	-1.	
28741	CC1622	RESIDUA	4.	8.00	0.372	0.15	14.8	1.12	0.48	0.77	8.12	0.	-5.11	5.38	1.201	-6.	
28741	CC1222	RESIDUA	4.	1.00	0.140	0.15	6.5	0.50	0.21	0.60	3.73	0.	0.	5.04	1.125	-1.	
28741	CC1222	RESIDUA	4.	7.98	0.375	0.15	14.1	1.07	0.45	0.76	8.06	0.	-5.09	5.25	1.172	-6.	
28741	CC0822	RESIDUA	4.	1.00	0.149	0.15	6.7	0.51	0.22	0.61	3.69	0.	0.	5.02	1.120	-1.	
28741	CC0822	RESIDUA	4.	6.41	0.379	0.15	12.2	0.93	0.39	0.69	6.81	0.	-3.95	4.88	1.089	-4.	
28741	STIG15	RESIDUA	4.	1.00	0.049	0.15	6.9	0.51	0.22	0.58	4.12	0.	0.	5.43	1.212	-3.	
28741	STIG15	RESIDUA	4.	197.56	0.171	0.15	206.7	15.31	6.51	12.38	203.39	0.	-143.45	94.14	21.012	-375.	
28741	STIG10	RESIDUA	4.	1.00	0.070	0.15	6.7	0.49	0.21	0.56	4.03	0.	0.	5.30	1.182	-2.	
28741	STIG10	RESIDUA	4.	18.27	0.218	0.15	23.9	1.77	0.75	1.40	19.96	0.	-12.60	11.27	2.515	-29.	
28741	STIG15	RESIDUA	4.	1.00	0.080	0.15	6.6	0.49	0.21	0.56	3.99	0.	0.	5.25	1.171	-2.	
28741	STIG15	RESIDUA	4.	10.72	0.228	0.15	16.2	1.20	0.51	1.00	12.54	0.	-7.09	8.16	1.821	-16.	
28741	DEADV3	RESIDUA	4.	1.00	0.099	0.15	8.8	0.65	0.28	0.62	3.91	0.	0.	5.45	1.216	-4.	
28741	DEADV3	RESIDUA	4.	11.88	0.289	0.15	32.4	2.40	1.02	1.23	12.56	0.	-7.94	9.26	2.068	-27.	
28741	DEHTPM	RESIDUA	4.	1.00	0.148	0.15	8.9	0.66	0.28	0.65	3.70	0.	0.	5.28	1.178	-3.	
28741	DEHTPM	RESIDUA	4.	5.22	0.352	0.15	16.6	1.23	0.52	0.79	6.16	0.	-3.08	5.64	1.258	-8.	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST										WORTH	%	PAY			
		MW		RATIO *10**6			INSNC			ELEC				15%		BACK			
28741 DES0A3 DISTILL	4.	1.00	0.084	0.15	7.8	0.58	0.25	0.60	4.87	0.	0.	6.29	1.404	-6.	0	56			
28741 DES0A3 DISTILL	4.	13.79	0.251	0.15	46.0	3.41	1.45	1.60	18.37	0.	-9.33	15.49	3.457	-53.	0	60			
28741 DES0A3 RESIDUA	4.	1.00	0.084	0.15	7.8	0.58	0.25	0.60	3.97	0.	0.	5.40	1.204	-3.	0	56			
28741 DES0A3 RESIDUA	4.	13.79	0.251	0.15	46.0	3.41	1.45	1.60	14.98	0.	-9.33	12.11	2.702	-42.	0	63			
28741 GTSOAD DISTILL	4.	1.00	0.141	0.15	6.0	0.46	0.20	0.52	4.56	0.	0.	5.75	1.282	-3.	-53	0			
28741 GTSOAD DISTILL	4.	4.26	0.313	0.15	8.6	0.64	0.27	0.48	7.02	0.	-2.38	6.02	1.344	-5.	0	56			
28741 GTRA08 DISTILL	4.	1.00	0.131	0.15	7.1	0.53	0.22	0.54	4.62	0.	0.	5.91	1.320	-4.	163	0			
28741 GTRA08 DISTILL	4.	7.04	0.341	0.15	14.5	1.07	0.46	0.65	9.49	0.	-4.41	7.26	1.620	-12.	0	58			
28741 GTRA12 DISTILL	4.	1.00	0.134	0.15	7.0	0.52	0.22	0.54	4.60	0.	0.	5.89	1.314	-4.	136	0			
28741 GTRA12 DISTILL	4.	6.88	0.347	0.15	14.5	1.07	0.46	0.65	9.24	0.	-4.29	7.13	1.591	-12.	0	58			
28741 GTRA16 DISTILL	4.	1.00	0.135	0.15	7.2	0.54	0.23	0.55	4.60	0.	0.	5.91	1.319	-4.	999	0			
28741 GTRA16 DISTILL	4.	6.42	0.343	0.15	14.6	1.08	0.46	0.65	8.85	0.	-3.96	7.08	1.581	-11.	0	58			
28741 GTR208 DISTILL	4.	1.00	0.135	0.15	6.8	0.50	0.21	0.54	4.60	0.	0.	5.86	1.307	-4.	-94	0			
28741 GTR208 DISTILL	4.	5.32	0.323	0.15	11.5	0.85	0.36	0.56	8.00	0.	-3.16	6.62	1.477	-9.	0	57			
28741 GTR212 DISTILL	4.	1.00	0.134	0.15	6.9	0.51	0.22	0.54	4.60	0.	0.	5.87	1.311	-4.	113	0			
28741 GTR212 DISTILL	4.	5.71	0.329	0.15	12.4	0.92	0.39	0.59	8.32	0.	-3.44	6.78	1.513	-9.	0	57			
28741 GTR216 DISTILL	4.	1.00	0.137	0.15	7.0	0.52	0.22	0.54	4.59	0.	0.	5.87	1.310	-4.	129	0			
28741 GTR216 DISTILL	4.	5.85	0.338	0.15	13.1	0.97	0.41	0.61	8.35	0.	-3.54	6.80	1.517	-10.	0	58			
28741 GTRW08 DISTILL	4.	1.00	0.110	0.15	7.2	0.53	0.23	0.55	4.73	0.	0.	6.04	1.348	-5.	999	0			
28741 GTRW08 DISTILL	4.	8.41	0.300	0.15	15.9	1.18	0.50	0.71	11.52	0.	-5.41	8.50	1.898	-16.	0	58			
28741 GTRW12 DISTILL	4.	1.00	0.118	0.15	7.2	0.53	0.23	0.55	4.69	0.	0.	6.00	1.338	-5.	999	0			
28741 GTRW12 DISTILL	4.	8.56	0.322	0.15	16.0	1.19	0.50	0.71	11.30	0.	-5.51	8.19	1.828	-16.	0	58			
28741 GTRW16 DISTILL	4.	1.00	0.120	0.15	7.4	0.55	0.23	0.55	4.68	0.	0.	6.01	1.341	-5.	999	0			
28741 GTRW16 DISTILL	4.	7.93	0.321	0.15	15.9	1.18	0.50	0.70	10.68	0.	-5.06	8.01	1.788	-15.	0	58			
28741 GTR308 DISTILL	4.	1.00	0.103	0.15	6.9	0.51	0.22	0.54	4.77	0.	0.	6.04	1.348	-5.	116	0			
28741 GTR308 DISTILL	4.	6.42	0.260	0.15	12.8	0.95	0.40	0.62	9.96	0.	-3.96	7.98	1.781	-13.	0	57			
28741 GTR312 DISTILL	4.	1.00	0.122	0.15	7.0	0.52	0.22	0.54	4.67	0.	0.	5.95	1.327	-4.	127	0			
28741 GTR312 DISTILL	4.	6.92	0.315	0.15	13.4	0.99	0.42	0.63	9.73	0.	-4.32	7.45	1.663	-12.	0	57			
28741 GTR316 DISTILL	4.	1.00	0.121	0.15	7.2	0.53	0.23	0.55	4.67	0.	0.	5.97	1.333	-4.	183	0			
28741 GTR316 DISTILL	4.	6.81	0.312	0.15	13.9	1.03	0.44	0.64	9.66	0.	-4.24	7.53	1.680	-12.	0	58			
28741 FCPADS DISTILL	4.	1.00	0.092	0.15	7.1	0.52	0.22	0.83	4.83	0.	0.	6.40	1.428	-6.	187	0			
28741 FCPADS DISTILL	4.	15.07	0.279	0.15	36.5	2.70	1.15	6.39	19.07	0.	-10.27	19.04	4.249	-60.	0	59			
28741 FCMCDS DISTILL	4.	1.00	0.123	0.15	7.2	0.53	0.23	0.80	4.66	0.	0.	6.22	1.388	-5.	999	0			
28741 FCMCDS DISTILL	4.	11.92	0.260	0.15	31.1	2.31	0.98	4.80	13.91	0.	-7.97	14.03	3.132	-42.	0	60			
28951 OHCCGN RESIDUA	4.	0.	0.	0.68	1.4	0.10	0.04	0.18	0.68	1.22	0.	2.22	1.000	0.	0	0			
28951 STM141 RESIDUA	4.	0.36	0.146	0.68	2.6	0.19	0.08	0.27	0.84	0.77	0.	2.16	0.975	-0.	8	10			
28951 STM141 COAL-FG	4.	0.36	0.146	0.68	4.4	0.33	0.14	0.43	0.49	0.77	0.	2.17	0.978	-1.	6	12			
28951 STM141 COAL-AF	4.	0.36	0.146	0.68	4.0	0.30	0.13	0.38	0.49	0.77	0.	2.07	0.935	-1.	9	10			
28951 STM068 RESIDUA	4.	0.28	0.111	0.68	2.2	0.17	0.07	0.26	0.80	0.88	0.	2.17	0.981	-0.	9	10			
28951 STM068 COAL-FG	4.	0.28	0.111	0.68	4.0	0.30	0.13	0.42	0.47	0.88	0.	2.19	0.988	-1.	6	13			
28951 STM068 COAL-AF	4.	0.28	0.111	0.68	3.7	0.28	0.12	0.37	0.47	0.88	0.	2.12	0.955	-1.	8	10			
28951 PFBSTM COAL-PF	4.	0.56	0.221	0.68	5.9	0.45	0.19	0.48	0.55	0.54	0.	2.20	0.992	-2.	5	13			
28951 TISTMT RESIDUA	4.	0.73	0.289	0.68	11.0	0.23	0.35	0.49	1.02	0.33	0.	3.03	1.368	-7.	0	999			
28951 TISTMT COAL	4.	0.73	0.289	0.68	14.0	1.06	0.45	0.69	0.59	0.33	0.	3.13	1.411	-9.	0	999			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	/HEAT COST															
		MW	REQD	RATIO *10**6		INSNC		ELEC			WORTH	%	PAY						
											15%		BACK						
28951 TIHRSG	RESIDUA	4.	0.31	0.101	0.68	9.1	0.67	0.29	0.36	0.86	0.84	0.	3.02	1.363	-6.	0	97		
28951 TIHRSG	COAL	4.	0.31	0.101	0.68	11.7	0.89	0.38	0.53	0.50	0.84	0.	3.14	1.417	-8.	0	435		
28951 STIRL	DISTILL	4.	0.85	0.247	0.68	2.7	0.20	0.08	0.25	1.53	0.19	0.	2.24	1.012	-1.	3	17		
28951 STIRL	RESIDUA	4.	0.85	0.247	0.68	2.7	0.20	0.08	0.25	1.24	0.19	0.	1.96	0.885	0.	17	6		
28951 STIRL	COAL	4.	0.85	0.247	0.68	5.0	0.37	0.16	0.42	0.72	0.19	0.	1.85	0.837	-1.	12	8		
28951 HEGT85	COAL-AF	4.	1.00	0.164	0.68	15.5	1.18	0.50	0.79	0.92	0.	0.	3.39	1.530	-11.	0	999		
28951 HEGT85	COAL-AF	4.	2.20	0.203	0.68	23.3	1.77	0.75	0.89	1.56	0.	-0.88	4.09	1.847	-16.	0	999		
28951 HEGT60	COAL-AF	4.	1.00	0.174	0.68	14.0	1.06	0.45	0.68	0.91	0.	0.	3.11	1.403	-9.	0	999		
28951 HEGT60	COAL-AF	4.	1.09	0.180	0.68	14.2	1.08	0.46	0.59	0.96	0.	-0.07	3.02	1.364	-9.	0	999		
28951 HEGT00	COAL-AF	4.	0.51	0.086	0.68	8.6	0.65	0.28	0.41	0.66	0.60	0.	2.60	1.173	-5.	0	999		
28951 FCMCCL	COAL	4.	0.94	0.324	0.68	10.3	0.80	0.34	0.56	0.70	0.08	0.	2.48	1.120	-5.	2	20		
28951 FCSTCL	COAL	4.	1.00	0.359	0.68	11.3	0.88	0.37	0.79	0.71	0.	0.	2.75	1.242	-7.	0	999		
28951 FCSTCL	COAL	4.	1.53	0.409	0.68	12.9	1.00	0.43	0.74	0.88	0.	-0.39	2.66	1.199	-7.	1	23		
28951 IGGTST	COAL	4.	1.00	0.289	0.68	11.4	0.89	0.38	0.73	0.79	0.	0.	2.78	1.255	-7.	0	999		
28951 IGGTST	COAL	4.	1.08	0.297	0.68	11.3	0.88	0.38	0.64	0.82	0.	-0.06	2.65	1.197	-6.	1	25		
28951 GTSQAR	RESIDUA	4.	0.96	0.292	0.68	3.6	0.27	0.11	0.24	1.30	0.05	0.	1.97	0.888	-0.	12	7		
28951 GTAC08	RESIDUA	4.	0.77	0.263	0.68	2.7	0.20	0.09	0.21	1.12	0.28	0.	1.90	0.859	0.	19	5		
28951 GTAC12	RESIDUA	4.	0.95	0.325	0.68	3.0	0.22	0.10	0.23	1.23	0.06	0.	1.83	0.826	0.	19	5		
28951 GTAC16	RESIDUA	4.	1.00	0.338	0.68	3.4	0.26	0.11	0.30	1.26	0.	0.	1.92	0.866	-0.	14	7		
28951 GTAC16	RESIDUA	4.	1.07	0.346	0.68	3.4	0.25	0.11	0.24	1.30	0.	-0.05	1.84	0.832	0.	17	6		
28951 GTWC16	RESIDUA	4.	1.00	0.301	0.68	3.8	0.28	0.12	0.32	1.33	0.	0.	2.05	0.926	-1.	10	9		
28951 GTWC16	RESIDUA	4.	1.14	0.315	0.68	3.8	0.28	0.12	0.25	1.42	0.	-0.10	1.97	0.890	-0.	12	8		
28951 CC1626	RESIDUA	4.	1.00	0.301	0.68	4.2	0.32	0.14	0.43	1.33	0.	0.	2.22	1.002	-1.	5	14		
28951 CC1626	RESIDUA	4.	1.91	0.362	0.68	5.3	0.40	0.17	0.40	1.93	0.	-0.67	2.23	1.007	-2.	5	14		
28951 CC1622	RESIDUA	4.	1.00	0.315	0.68	4.0	0.30	0.13	0.42	1.30	0.	0.	2.15	0.971	-1.	7	11		
28951 CC1622	RESIDUA	4.	1.72	0.370	0.68	4.7	0.36	0.15	0.37	1.76	0.	-0.53	2.11	0.952	-1.	7	11		
28951 CC1222	RESIDUA	4.	1.00	0.318	0.68	3.8	0.29	0.12	0.42	1.30	0.	0.	2.13	0.961	-1.	7	11		
28951 CC1222	RESIDUA	4.	1.72	0.374	0.68	4.5	0.34	0.15	0.37	1.74	0.	-0.52	2.07	0.936	-1.	8	10		
28951 CC0822	RESIDUA	4.	1.00	0.340	0.68	3.9	0.29	0.13	0.41	1.25	0.	0.	2.09	0.941	-1.	9	10		
28951 CC0822	RESIDUA	4.	1.38	0.377	0.68	4.1	0.31	0.13	0.35	1.47	0.	-0.28	1.99	0.897	-1.	10	8		
28951 ST1615	RESIDUA	4.	1.00	0.111	0.68	4.5	0.33	0.14	0.43	1.69	0.	0.	2.59	1.166	-3.	0	94		
28951 ST1615	RESIDUA	4.	42.95	0.171	0.68	51.1	3.78	1.61	3.19	44.22	0.	-30.61	22.18	10.005	-86.	0	59		
28951 ST1610	RESIDUA	4.	1.00	0.160	0.68	4.1	0.31	0.13	0.40	1.60	0.	0.	2.43	1.097	-2.	0	999		
28951 ST1610	RESIDUA	4.	3.97	0.213	0.68	7.8	0.58	0.25	0.52	4.34	0.	-2.17	3.51	1.585	-7.	0	64		
28951 ST1615	RESIDUA	4.	1.00	0.182	0.68	4.0	0.29	0.12	0.39	1.56	0.	0.	2.36	1.066	-2.	0	999		
28951 ST1615	RESIDUA	4.	2.33	0.228	0.68	5.4	0.40	0.17	0.39	2.73	0.	-0.97	2.72	1.225	-3.	0	82		
28951 DEADV3	RESIDUA	4.	1.00	0.241	0.68	5.7	0.42	0.18	0.43	1.44	0.	0.	2.47	1.116	-3.	0	999		
28951 DEADV3	RESIDUA	4.	2.33	0.303	0.68	7.9	0.58	0.25	0.43	2.46	0.	-0.97	2.75	1.242	-5.	0	999		
28951 DEHTPM	RESIDUA	4.	1.00	0.356	0.68	5.3	0.39	0.17	0.42	1.22	0.	0.	2.20	0.993	-2.	5	13		
28951 DEHTPM	RESIDUA	4.	1.19	0.378	0.68	5.4	0.40	0.17	0.35	1.33	0.	-0.14	2.12	0.955	-2.	7	11		
28951 DESOA3	DISTILL	4.	1.00	0.207	0.68	4.8	0.35	0.15	0.41	1.85	0.	0.	2.77	1.248	-3.	0	70		
28951 DESOA3	DISTILL	4.	2.65	0.266	0.68	9.3	0.69	0.29	0.48	3.53	0.	-1.20	3.79	1.709	-9.	0	64		
28951 DESOA3	RESIDUA	4.	1.00	0.207	0.68	4.8	0.35	0.15	0.41	1.51	0.	0.	2.43	1.094	-2.	0	999		
28951 DESOA3	RESIDUA	4.	2.65	0.266	0.68	9.3	0.69	0.29	0.48	2.88	0.	-1.20	3.14	1.416	-7.	0	86		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100																	
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																											
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES OANDM FUEL PURCHD REVNUE TOTAL NORML PRESNT ROI GROSS																									
SYSTEM	FUEL REQD MW	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC	WORTH 15%	%	PAY BACK																			
28951 GTSOAD DISTILL	4.	0.91	0.299	0.68	2.8	0.21	0.09	0.22	1.50	0.11	0.	2.13	0.959	-0.	9	9											
28951 GTRA08 DISTILL	4.	1.00	0.313	0.68	4.3	0.32	0.13	0.35	1.60	0.	0.	2.40	1.084	-2.	0	999											
20951 GTRA08 DISTILL	4.	1.44	0.351	0.68	4.7	0.35	0.15	0.28	1.95	0.	-0.32	2.40	1.083	-2.	0	999											
28951 GTRA12 DISTILL	4.	1.00	0.318	0.68	4.2	0.31	0.13	0.35	1.59	0.	0.	2.38	1.073	-2.	0	999											
28951 GTRA12 DISTILL	4.	1.42	0.356	0.68	4.6	0.34	0.14	0.28	1.91	0.	-0.31	2.37	1.068	-2.	0	29											
28951 GTRA16 DISTILL	4.	1.00	0.319	0.68	4.4	0.32	0.14	0.35	1.59	0.	0.	2.39	1.080	-2.	0	999											
28951 GTRA16 DISTILL	4.	1.34	0.351	0.68	4.7	0.35	0.15	0.28	1.85	0.	-0.25	2.37	1.069	-2.	0	29											
28951 GTR208 DISTILL	4.	1.00	0.317	0.68	3.8	0.28	0.12	0.32	1.59	0.	0.	2.31	1.041	-1.	1	24											
28951 GTR208 DISTILL	4.	1.12	0.330	0.68	3.8	0.28	0.12	0.25	1.69	0.	-0.09	2.24	1.012	-1.	4	15											
28951 GTR212 DISTILL	4.	1.00	0.315	0.68	4.0	0.29	0.13	0.33	1.60	0.	0.	2.35	1.058	-2.	0	30											
28951 GTR212 DISTILL	4.	1.20	0.335	0.68	4.0	0.30	0.13	0.26	1.75	0.	-0.15	2.29	1.034	-1.	2	20											
28951 GTR216 DISTILL	4.	1.00	0.321	0.68	4.1	0.30	0.13	0.33	1.58	0.	0.	2.35	1.058	-2.	0	29											
28951 GTR216 DISTILL	4.	1.23	0.344	0.68	4.2	0.31	0.13	0.26	1.76	0.	-0.17	2.30	1.036	-2.	2	20											
28951 GTRW08 DISTILL	4.	1.00	0.262	0.68	4.5	0.33	0.14	0.37	1.72	0.	0.	2.56	1.153	-3.	0	102											
28951 GTRW08 DISTILL	4.	1.73	0.308	0.68	5.3	0.40	0.17	0.31	2.38	0.	-0.54	2.71	1.224	-3.	0	78											
28951 GTRW12 DISTILL	4.	1.00	0.278	0.68	4.5	0.33	0.14	0.36	1.68	0.	0.	2.52	1.136	-2.	0	162											
28951 GTRW12 DISTILL	4.	1.78	0.329	0.68	5.4	0.40	0.17	0.31	2.35	0.	-0.57	2.67	1.202	-3.	0	89											
28951 GTRW16 DISTILL	4.	1.00	0.280	0.68	4.6	0.34	0.14	0.37	1.68	0.	0.	2.53	1.140	-2.	0	174											
28951 GTRW16 DISTILL	4.	1.66	0.327	0.68	5.4	0.40	0.17	0.31	2.24	0.	-0.49	2.64	1.190	-3.	0	101											
28951 GTR308 DISTILL	4.	1.00	0.249	0.68	4.0	0.30	0.13	0.34	1.75	0.	0.	2.52	1.135	-2.	0	96											
28951 GTR308 DISTILL	4.	1.32	0.272	0.68	4.2	0.31	0.13	0.27	2.05	0.	-0.23	2.53	1.141	-2.	0	90											
28951 GTR312 DISTILL	4.	1.00	0.263	0.68	4.1	0.31	0.13	0.35	1.67	0.	0.	2.46	1.109	-2.	0	999											
28951 GTR312 DISTILL	4.	1.47	0.319	0.68	4.6	0.34	0.14	0.28	2.07	0.	-0.34	2.49	1.122	-2.	0	753											
28951 GTR316 DISTILL	4.	1.00	0.281	0.68	4.3	0.32	0.14	0.35	1.68	0.	0.	2.48	1.121	-2.	0	443											
28951 GTR316 DISTILL	4.	1.45	0.316	0.68	4.7	0.35	0.15	0.29	2.06	0.	-0.33	2.52	1.135	-3.	0	247											
28951 FCPADS DISTILL	4.	1.00	0.210	0.68	4.0	0.30	0.13	0.65	1.84	0.	0.	2.92	1.316	-3.	0	64											
28951 FCPADS DISTILL	4.	3.28	0.279	0.68	8.6	0.64	0.27	1.47	4.14	0.	-1.66	4.86	2.194	-12.	0	61											
28951 FCMCDS DISTILL	4.	1.00	0.261	0.68	4.2	0.31	0.13	0.62	1.68	0.	0.	2.73	1.233	-3.	0	72											
28951 FCMCDS DISTILL	4.	2.59	0.360	0.68	7.3	0.54	0.23	1.12	3.02	0.	-1.16	3.75	1.691	-8.	0	64											
29111 ONOCCN COAL-FG	14.	0.	0.	0.13	23.8	1.80	0.77	1.47	8.16	4.72	0.	16.92	1.000	0.	0	0											
29111 STM141 RESIDUA	14.	1.00	0.158	0.13	15.1	1.15	0.49	1.05	15.85	0.	0.	18.53	1.095	-1.	-16	0											
29111 STM141 RESIDUA	14.	1.26	0.186	0.13	15.9	1.21	0.51	0.88	16.31	0.	-0.73	18.18	1.074	-0.	-15	0											
29111 STM141 COAL-FG	14.	1.00	0.158	0.13	33.4	2.53	1.08	2.21	9.20	0.	0.	15.03	0.888	1.	17	6											
29111 STM141 COAL-FG	14.	1.26	0.186	0.13	29.8	2.26	0.96	1.83	9.47	0.	-0.73	13.80	0.815	7.	32	3											
29111 STM141 COAL-AF	14.	1.00	0.158	0.13	26.3	1.99	0.85	2.05	9.20	0.	0.	14.10	0.833	8.	59	2											
29111 STM141 COAL-AF	14.	1.26	0.186	0.13	21.1	1.60	0.68	1.66	9.47	0.	-0.73	12.69	0.750	15.	999	0											
29111 STM088 RESIDUA	14.	0.84	0.132	0.13	14.1	1.07	0.46	0.83	15.56	0.77	0.	18.68	1.104	-1.	-16	0											
29111 STM088 COAL-FG	14.	0.84	0.132	0.13	27.5	2.09	0.89	1.72	9.03	0.77	0.	14.50	0.856	6.	38	3											
29111 STM088 COAL-AF	14.	0.84	0.132	0.13	19.9	1.51	0.64	1.60	9.03	0.77	0.	13.55	0.801	12.	999	0											
29111 PFBSTM COAL-PF	14.	1.00	0.153	0.13	35.9	2.72	1.16	2.64	9.25	0.	0.	15.77	0.932	-2.	11	8											
29111 PFBSTM COAL-PF	14.	2.24	0.261	0.13	35.9	2.73	1.16	2.89	10.61	0.	-3.52	13.86	0.819	4.	19	5											
29111 TISTMT RESIDUA	14.	1.00	0.155	0.13	44.4	3.37	1.43	1.80	15.90	0.	0.	22.51	1.330	-27.	0	60											
29111 TISTMT RESIDUA	14.	3.07	0.312	0.13	89.1	6.76	2.87	2.77	19.73	0.	-5.87	26.25	1.551	-60.	0	71											
29111 TISTMT COAL	14.	1.00	0.155	0.13	65.6	4.98	2.12	3.03	9.23	0.	0.	19.36	1.144	-28.	0	999											

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
										*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****									
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS					
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	+ INSNC	ELEC					WORTH					%			
		MW										15%						PAY BACK	
29111 TISTMT COAL	14.	3.07	0.312	0.13	112.8	8.56	3.64	3.99	11.45	0.	-5.87	21.77	1.286	-58.	0	999			
29111 TIHRSG RESIDUA	14.	1.00	0.088	0.13	58.8	4.35	1.85	2.07	17.17	0.	0.	25.44	1.503	-43.	0	61			
29111 TIHRSG RESIDUA	14.	1.82	0.132	0.13	85.2	6.31	2.68	2.52	19.72	0.	-2.33	28.91	1.708	-66.	0	63			
29111 TIHRSG COAL	14.	1.00	0.088	0.13	82.4	6.25	2.66	3.39	9.97	0.	0.	22.26	1.315	-45.	0	260			
29111 TIHRSG COAL	14.	1.82	0.132	0.13	109.0	8.27	3.52	3.77	11.45	0.	-2.33	24.68	1.458	-65.	0	224			
29111 STIRL DISTILL	14.	1.00	0.106	0.13	22.1	1.63	0.70	1.20	20.62	0.	0.	24.15	1.427	-22.	149	0			
29111 STIRL DISTILL	14.	3.50	0.228	0.13	39.3	2.91	1.24	1.49	29.06	0.	-7.07	27.62	1.632	-40.	0	57			
29111 STIRL RESIDUA	14.	1.00	0.106	0.13	22.1	1.64	0.70	1.20	16.82	0.	0.	20.35	1.202	-10.	-77	0			
29111 STIRL RESIDUA	14.	3.50	0.228	0.13	39.3	2.91	1.24	1.49	23.71	0.	-7.07	22.27	1.316	-24.	0	58			
29111 STIRL COAL	14.	1.00	0.106	0.13	41.3	3.06	1.30	2.39	9.77	0.	0.	16.51	0.976	-7.	7	11			
29111 STIRL COAL	14.	3.50	0.228	0.13	69.4	5.14	2.19	2.99	13.77	0.	-7.07	17.00	1.005	-21.	5	14			
29111 HEGT60 COAL-AF	14.	1.00	0.005	0.13	52.3	3.97	1.69	2.61	10.87	0.	0.	19.14	1.131	-21.	0	999			
29111 HEGT60 COAL-AF	14.	11.63	0.015	0.13	182.0	13.81	5.87	7.44	39.68	0.	-30.10	36.70	2.169	-138.	0	81			
29111 HEGT00 COAL-AF	14.	1.00	0.045	0.13	49.6	3.77	1.60	2.55	10.43	0.	0.	18.34	1.084	-17.	0	999			
29111 HEGT00 COAL-AF	14.	2.96	0.090	0.13	72.0	5.46	2.32	3.10	14.87	0.	-5.56	20.20	1.194	-33.	0	999			
29111 FCMCCL COAL	14.	1.00	0.134	0.13	48.4	3.77	1.60	2.72	9.46	0.	0.	17.55	1.037	-14.	3	18			
29111 FCMCCL COAL	14.	5.07	0.335	0.13	83.8	6.51	2.77	4.75	14.74	0.	-11.53	17.25	1.019	-31.	4	14			
29111 FCSTCL COAL	14.	1.00	0.139	0.13	47.4	3.69	1.57	2.72	9.40	0.	0.	17.37	1.027	-13.	3	17			
29111 FCSTCL COAL	14.	7.07	0.389	0.13	97.4	7.57	3.22	5.57	16.93	0.	-17.20	16.09	0.951	-34.	6	12			
29111 IGGTST COAL	14.	1.00	0.108	0.13	46.5	3.61	1.54	2.46	9.74	0.	0.	17.35	1.025	-13.	3	17			
29111 IGGTST COAL	14.	4.82	0.265	0.13	74.9	5.82	2.47	2.71	15.77	0.	-10.81	15.96	0.943	-22.	6	12			
29111 GTSOAR RESIDUA	14.	1.00	0.102	0.13	21.9	1.62	0.69	1.13	16.90	0.	0.	20.34	1.202	-9.	-71	0			
29111 GTSOAR RESIDUA	14.	5.84	0.267	0.13	34.3	2.54	1.08	1.32	30.68	0.	-13.72	21.90	1.294	-20.	0	57			
29111 GTAC08 RESIDUA	14.	1.00	0.135	0.13	17.7	1.31	0.56	1.03	16.28	0.	0.	19.17	1.133	-4.	-24	0			
29111 GTAC08 RESIDUA	14.	4.11	0.311	0.13	23.5	1.74	0.74	1.01	23.16	0.	-8.80	17.84	1.054	-2.	-55	0			
29111 GTAC12 RESIDUA	14.	1.00	0.132	0.13	20.9	1.54	0.66	1.10	16.33	0.	0.	19.63	1.160	-7.	-44	0			
29111 GTAC12 RESIDUA	14.	5.17	0.332	0.13	28.2	2.09	0.89	1.14	25.81	0.	-11.81	18.11	1.070	-5.	0	58			
29111 GTAC16 RESIDUA	14.	1.00	0.127	0.13	21.3	1.58	0.67	1.11	16.43	0.	0.	19.79	1.169	-8.	-52	0			
29111 GTAC16 RESIDUA	14.	6.01	0.336	0.13	32.8	2.43	1.03	1.27	28.31	0.	-14.18	18.87	1.115	-10.	0	60			
29111 GTWC16 RESIDUA	14.	1.00	0.119	0.13	21.5	1.59	0.68	1.12	16.59	0.	0.	19.98	1.180	-8.	-58	0			
29111 GTWC16 RESIDUA	14.	6.10	0.316	0.13	30.8	2.28	0.97	1.23	29.47	0.	-14.44	19.51	1.153	-11.	0	58			
29111 CC1626 RESIDUA	14.	1.00	0.115	0.13	21.6	1.64	0.70	1.21	16.64	0.	0.	20.19	1.193	-9.	-76	0			
29111 CC1626 RESIDUA	14.	8.97	0.344	0.13	41.8	3.17	1.35	1.69	37.24	0.	-22.57	20.88	1.233	-21.	0	62			
29111 CC1622 RESIDUA	14.	1.00	0.121	0.13	21.4	1.62	0.69	1.20	16.53	0.	0.	20.05	1.185	-9.	-67	0			
29111 CC1622 RESIDUA	14.	8.05	0.351	0.13	39.9	3.03	1.29	1.60	33.98	0.	-19.97	19.92	1.177	-17.	0	64			
29111 CC1222 RESIDUA	14.	1.00	0.122	0.13	21.0	1.59	0.68	1.20	16.51	0.	0.	19.98	1.181	-8.	-58	0			
29111 CC1222 RESIDUA	14.	8.00	0.354	0.13	37.7	2.86	1.22	1.57	33.67	0.	-19.82	19.50	1.152	-15.	0	64			
29111 CC0822 RESIDUA	14.	1.00	0.131	0.13	21.1	1.60	0.68	1.20	16.34	0.	0.	19.82	1.171	-8.	-56	0			
29111 CC0822 RESIDUA	14.	6.30	0.354	0.13	31.0	2.35	1.00	1.37	28.46	0.	-15.01	18.16	1.073	-7.	0	64			
29111 DEHTPM RESIDUA	14.	1.00	0.111	0.13	27.6	2.04	0.87	1.37	16.73	0.	0.	21.02	1.242	-14.	0	56			
29111 DEHTPM RESIDUA	14.	5.14	0.278	0.13	65.5	4.85	2.06	2.26	27.80	0.	-11.73	25.25	1.492	-45.	0	63			
29111 GTSOAR DISTILL	14.	1.00	0.124	0.13	20.2	1.50	0.64	1.09	20.21	0.	0.	23.44	1.385	-18.	-81	0			
29111 GTSOAR DISTILL	14.	5.05	0.309	0.13	25.0	1.85	0.79	1.06	32.28	0.	-11.47	24.50	1.448	-24.	0	55			
29111 GTRA08 DISTILL	14.	1.00	0.102	0.13	22.3	1.66	0.70	1.14	20.71	0.	0.	24.21	1.430	-22.	169	0			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW											15%		BACK				
29111	GTRA08	DISTILL	14.	9.83	0.311	0.13	54.2	4.02	1.71	1.87	51.40	0.	-25.02	33.98	2.008	-67.	0	57	
29111	GTRA12	DISTILL	14.	1.00	0.108	0.13	22.4	1.66	0.70	1.14	20.59	0.	0.	24.08	1.423	-21.	167	0	
29111	GTRA12	DISTILL	14.	9.26	0.322	0.13	48.7	3.60	1.53	1.72	48.26	0.	-23.39	31.73	1.875	-58.	0	57	
29111	GTRA16	DISTILL	14.	1.00	0.110	0.13	22.8	1.69	0.72	1.15	20.53	0.	0.	24.09	1.423	-22.	999	0	
29111	GTRA16	DISTILL	14.	8.41	0.322	0.13	48.0	3.55	1.51	1.69	44.96	0.	-20.98	30.73	1.816	-54.	0	57	
29111	GTR208	DISTILL	14.	1.00	0.112	0.13	21.7	1.60	0.68	1.12	20.49	0.	0.	23.90	1.412	-21.	124	0	
29111	GTR208	DISTILL	14.	6.63	0.306	0.13	36.9	2.73	1.16	1.39	39.04	0.	-16.13	28.19	1.666	-41.	0	57	
29111	GTR212	DISTILL	14.	1.00	0.112	0.13	22.0	1.63	0.69	1.13	20.49	0.	0.	23.94	1.415	-21.	140	0	
29111	GTR212	DISTILL	14.	7.19	0.313	0.13	39.7	2.94	1.25	1.47	40.64	0.	-17.53	28.77	1.700	-44.	0	57	
29111	GTR216	DISTILL	14.	1.00	0.114	0.13	22.3	1.65	0.70	1.14	20.44	0.	0.	23.93	1.414	-21.	160	0	
29111	GTR216	DISTILL	14.	7.41	0.321	0.13	42.6	3.16	1.34	1.54	41.01	0.	-18.14	28.90	1.708	-46.	0	57	
29111	GTRV08	DISTILL	14.	1.00	0.087	0.13	22.4	1.66	0.70	1.14	21.05	0.	0.	24.55	1.451	-23.	179	0	
29111	GTRV08	DISTILL	14.	11.49	0.275	0.13	57.2	4.24	1.80	1.98	61.09	0.	-29.72	39.40	2.328	-86.	0	57	
29111	GTRW12	DISTILL	14.	1.00	0.097	0.13	22.4	1.66	0.70	1.14	20.84	0.	0.	24.33	1.438	-22.	173	0	
29111	GTRW12	DISTILL	14.	11.30	0.303	0.13	49.9	3.69	1.57	1.79	57.95	0.	-29.19	35.82	2.116	-71.	0	57	
29111	GTRW16	DISTILL	14.	1.00	0.100	0.13	22.7	1.68	0.72	1.15	20.77	0.	0.	24.31	1.436	-22.	206	0	
29111	GTRW16	DISTILL	14.	10.16	0.306	0.13	48.4	3.58	1.52	1.73	53.12	0.	-25.95	34.00	2.009	-65.	0	57	
29111	GTR308	DISTILL	14.	1.00	0.079	0.13	21.8	1.61	0.69	1.13	21.24	0.	0.	24.67	1.457	-23.	142	0	
29111	GTR308	DISTILL	14.	8.54	0.233	0.13	39.0	2.89	1.23	1.49	51.39	0.	-21.35	35.65	2.106	-65.	0	56	
29111	GTR312	DISTILL	14.	1.00	0.105	0.13	21.8	1.62	0.69	1.13	20.65	0.	0.	24.08	1.423	-21.	136	0	
29111	GTR312	DISTILL	14.	8.45	0.307	0.13	40.3	2.98	1.27	1.50	46.09	0.	-21.09	30.75	1.817	-51.	0	57	
29111	GTR316	DISTILL	14.	1.00	0.104	0.13	22.2	1.65	0.70	1.14	20.66	0.	0.	24.15	1.427	-22.	160	0	
29111	GTR316	DISTILL	14.	8.30	0.304	0.13	41.4	3.06	1.30	1.53	45.68	0.	-20.67	30.90	1.826	-52.	0	57	
29111	FCPADS	DISTILL	14.	1.00	0.082	0.13	24.7	1.83	0.78	2.45	21.16	0.	0.	26.22	1.549	-29.	0	56	
29111	FCPADS	DISTILL	14.	17.55	0.279	0.13	141.3	10.46	4.45	27.73	86.17	0.	-46.87	81.95	4.842	-262.	0	59	
29111	FCMCDS	DISTILL	14.	1.00	0.110	0.13	25.2	1.87	0.79	2.35	20.52	0.	0.	25.54	1.509	-28.	0	56	
29111	FCMCDS	DISTILL	14.	13.88	0.360	0.13	121.2	8.98	3.82	20.74	62.87	0.	-36.49	59.92	3.540	-183.	0	60	
29112	ONOCGN	COAL-FG	52.	0.	0.	0.13	77.5	5.88	2.50	3.85	29.02	17.53	0.	58.78	1.000	0.	0	0	
29112	STN141	RESIDUA	52.	1.00	0.163	0.13	44.9	3.41	1.45	2.08	56.63	0.	0.	63.57	1.081	1.	-14	0	
29112	STN141	RESIDUA	52.	1.16	0.181	0.13	44.0	3.34	1.42	1.80	57.70	0.	-1.70	62.57	1.064	4.	-12	0	
29112	STN141	COAL-FG	52.	1.00	0.163	0.13	90.4	6.86	2.92	4.99	32.88	0.	0.	47.65	0.811	29.	48	3	
29112	STN141	COAL-FG	52.	1.16	0.181	0.13	93.8	7.11	3.02	4.69	33.50	0.	-1.70	46.64	0.793	30.	43	3	
29112	STN141	COAL-AF	52.	1.00	0.163	0.13	72.0	5.47	2.32	4.87	32.88	0.	0.	45.55	0.775	44.	999	0	
29112	STN141	COAL-AF	52.	1.16	0.181	0.13	69.6	5.28	2.25	4.50	33.50	0.	-1.70	43.84	0.746	51.	999	0	
29112	STM083	RESIDUA	52.	0.76	0.124	0.13	39.8	3.02	1.29	1.69	55.05	4.15	0.	65.20	1.109	-2.	-15	0	
29112	STM083	COAL-FG	52.	0.76	0.124	0.13	87.7	6.66	2.83	4.36	31.97	4.15	0.	49.97	0.850	23.	48	2	
29112	STM083	COAL-AF	52.	0.76	0.124	0.13	61.3	4.65	1.98	4.20	31.97	4.15	0.	46.94	0.799	45.	999	0	
29112	PFBSTM	COAL-PF	52.	1.00	0.158	0.13	91.5	6.95	2.95	6.57	33.08	0.	0.	49.55	0.843	22.	38	3	
29112	PFBSTM	COAL-PF	52.	2.10	0.258	0.13	84.8	6.43	2.73	7.86	37.56	0.	-11.60	42.99	0.731	45.	103	1	
29112	TISTMT	RESIDUA	52.	1.00	0.160	0.13	126.0	9.56	4.06	4.21	56.83	0.	0.	74.66	1.270	-73.	0	59	
29112	TISTMT	RESIDUA	52.	2.89	0.310	0.13	234.2	17.77	7.55	6.71	69.79	0.	-19.90	81.92	1.394	-147.	0	70	
29112	TISTMT	COAL	52.	1.00	0.160	0.13	177.6	13.48	5.73	7.18	33.00	0.	0.	59.39	1.010	-50.	4	14	
29112	TISTMT	COAL	52.	2.89	0.310	0.13	294.5	22.35	9.50	9.91	40.52	0.	-19.90	62.38	1.061	-115.	3	16	
29112	TIHRSG	RESIDUA	52.	1.00	0.091	0.13	160.8	11.91	5.06	4.95	61.51	0.	0.	83.44	1.419	-115.	0	59	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	LANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST RATIO *10**6	INSNC	ELEC											WORTH 15%	%	PAY BACK
29112 TIHRSG	RESIDUA	52.	1.74	0.132	0.13	226.2	16.76	7.12	6.28	70.10	0.	-7.83	92.42	1.572	-174.	0		61	
29112 TIHRSG	COAL	52.	1.00	0.091	0.13	213.4	16.20	6.89	8.09	35.72	0.	0.	66.89	1.138	-91.	0		999	
29112 TIHRSG	COAL	52.	1.74	0.132	0.13	286.6	21.76	9.25	9.61	40.70	0.	-7.83	73.49	1.250	-146.	0		999	
29112 STIRL	DISTILL	52.	1.00	0.110	0.13	76.7	5.68	2.42	2.92	73.82	0.	0.	84.85	1.443	-80.	999		0	
29112 STIRL	DISTILL	52.	3.35	0.228	0.13	133.8	9.91	4.21	4.15	103.30	0.	-24.76	96.88	1.648	-145.	0		57	
29112 STIRL	RESIDUA	52.	1.00	0.110	0.13	76.8	5.69	2.42	2.92	60.22	0.	0.	71.25	1.212	-38.	999		0	
29112 STIRL	RESIDUA	52.	3.35	0.228	0.13	134.0	9.93	4.22	4.15	84.27	0.	-24.70	77.88	1.325	-85.	0		59	
29112 STIRL	COAL	52.	1.00	0.110	0.13	130.0	9.63	4.09	6.06	34.97	0.	0.	54.75	0.931	-11.	10		8	
29112 STIRL	COAL	52.	3.35	0.228	0.13	239.3	17.72	7.53	8.92	48.93	0.	-24.70	58.42	0.994	-74.	5		13	
29112 HEGT60	COAL-AF	52.	1.00	0.005	0.13	147.7	11.21	4.77	6.64	39.09	0.	0.	61.70	1.050	-43.	1		25	
29112 HEGT60	COAL-AF	52.	11.13	0.015	0.13	545.7	41.41	17.61	22.61	141.06	0.	-106.55	116.13	1.976	-405.	0		83	
29112 HEGT00	COAL-AF	52.	1.00	0.047	0.13	130.7	9.92	4.22	6.25	37.43	0.	0.	57.82	0.984	-23.	6		12	
29112 HEGT00	COAL-AF	52.	2.83	0.090	0.13	176.8	13.42	5.71	8.12	52.87	0.	-19.30	60.82	1.035	-54.	3		17	
29112 FCMCCL	COAL	52.	1.00	0.139	0.13	131.1	10.19	4.33	6.95	33.84	0.	0.	55.31	0.941	-17.	9		9	
29112 FCMCCL	COAL	52.	4.85	0.335	0.13	212.3	16.50	7.02	13.65	52.40	0.	-40.52	49.05	0.834	-38.	10		9	
29112 FCSTCL	COAL	52.	1.00	0.144	0.13	128.9	10.02	4.26	6.79	33.63	0.	0.	54.70	0.930	-14.	10		9	
29112 FCSTCL	COAL	52.	6.70	0.387	0.13	245.9	19.11	8.13	15.82	59.91	0.	-60.01	42.97	0.731	-35.	11		8	
29112 IGGTST	COAL	52.	1.00	0.111	0.13	121.7	9.47	4.02	5.43	34.90	0.	0.	53.82	0.916	-7.	12		8	
29112 IGGTST	COAL	52.	4.55	0.263	0.13	206.4	16.04	6.82	6.38	55.80	0.	-37.38	47.66	0.811	-29.	11		8	
29112 GTSOAR	RESIDUA	52.	1.00	0.105	0.13	58.3	4.32	1.84	2.36	60.54	0.	0.	69.05	1.175	-22.	-31		0	
29112 GTSOAR	RESIDUA	52.	5.59	0.267	0.13	110.6	8.19	3.48	3.50	109.06	0.	-48.32	75.91	1.291	-68.	0		57	
29112 GTAC08	RESIDUA	52.	1.00	0.140	0.13	55.1	4.08	1.74	2.28	58.21	0.	0.	66.30	1.128	-12.	-23		0	
29112 GTAC08	RESIDUA	52.	3.93	0.311	0.13	76.3	5.65	2.40	2.57	82.34	0.	-30.84	62.12	1.057	-9.	-57		0	
29112 GTAC12	RESIDUA	52.	1.00	0.136	0.13	56.6	4.19	1.78	2.31	58.42	0.	0.	66.70	1.135	-14.	-25		0	
29112 GTAC12	RESIDUA	52.	4.95	0.332	0.13	92.2	6.83	2.90	2.99	91.74	0.	-41.54	62.92	1.070	-19.	0		58	
29112 GTAC16	RESIDUA	52.	1.00	0.131	0.13	58.1	4.30	1.83	2.34	58.79	0.	0.	67.26	1.144	-16.	-27		0	
29112 GTAC16	RESIDUA	52.	5.75	0.336	0.13	111.3	8.25	3.51	3.49	100.64	0.	-49.96	65.93	1.122	-37.	0		61	
29112 GTWC16	RESIDUA	52.	1.00	0.122	0.13	57.1	4.23	1.80	2.32	59.36	0.	0.	67.71	1.152	-17.	-27		0	
29112 GTWC16	RESIDUA	52.	5.84	0.316	0.13	97.2	7.20	3.06	3.15	104.77	0.	-50.88	67.29	1.145	-35.	0		57	
29112 CC1626	RESIDUA	52.	1.00	0.119	0.13	57.3	4.35	1.85	2.44	59.59	0.	0.	68.23	1.161	-20.	-30		0	
29112 CC1626	RESIDUA	52.	8.51	0.342	0.13	128.9	9.78	4.16	4.23	131.74	0.	-78.98	70.93	1.207	-63.	0		61	
29112 CC1622	RESIDUA	52.	1.00	0.125	0.13	57.9	4.39	1.87	2.44	59.18	0.	0.	67.89	1.155	-19.	-30		0	
29112 CC1622	RESIDUA	52.	7.63	0.350	0.13	132.0	10.02	4.26	4.18	120.25	0.	-69.80	68.90	1.172	-58.	0		64	
29112 CC1222	RESIDUA	52.	1.00	0.126	0.13	56.8	4.31	1.83	2.43	59.10	0.	0.	67.68	1.151	-18.	-28		0	
29112 CC1222	RESIDUA	52.	7.58	0.352	0.13	123.2	9.35	3.98	4.05	119.14	0.	-69.24	67.27	1.144	-48.	0		64	
29112 CC0822	RESIDUA	52.	1.00	0.136	0.13	56.1	4.25	1.81	2.42	58.48	0.	0.	66.95	1.139	-15.	-23		0	
29112 CC0822	RESIDUA	52.	5.97	0.352	0.13	94.0	7.13	3.03	3.26	100.68	0.	-52.25	61.86	1.052	-17.	0		62	
29112 DEHTPM	RESIDUA	52.	1.00	0.114	0.13	86.0	6.37	2.71	3.21	59.90	0.	0.	72.20	1.228	-45.	0		56	
29112 DEHTPM	RESIDUA	52.	4.92	0.278	0.13	225.6	16.71	7.10	6.63	98.80	0.	-41.23	88.01	1.497	-160.	0		63	
29112 GTSOAD	DISTILL	52.	1.00	0.128	0.13	54.4	4.03	1.71	2.26	72.33	0.	0.	80.33	1.366	-56.	-49		0	
29112 GTSOAD	DISTILL	52.	4.83	0.309	0.13	84.3	6.25	2.66	2.80	114.74	0.	-40.33	86.10	1.465	-88.	0		56	
29112 GTRA08	DISTILL	52.	1.00	0.106	0.13	59.8	4.43	1.88	2.39	74.17	0.	0.	82.86	1.410	-66.	-65		0	
29112 GTRA08	DISTILL	52.	9.41	0.311	0.13	171.6	12.71	5.40	5.11	182.71	0.	-88.49	117.44	1.998	-227.	0		57	
29112 GTRA12	DISTILL	52.	1.00	0.111	0.13	60.3	4.46	1.90	2.40	73.71	0.	0.	82.47	1.403	-65.	-65		0	

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUUE TOTAL NORML PRESNT ROI GROSS																	
SYSTEM	FUEL	REQD	GEN/	/HEAT COST															
		MW	REQD	RATIO *10**6			INSNC										WORTH 15%	%	PAY BACK
29112 GTRA12	DISTILL	52.	8.86	0.322	0.13	165.6	12.27	5.22	4.94	171.54	0.	-82.69	111.27	1.893	-205.	0	57		
29112 GTRA16	DISTILL	52.	1.00	0.114	0.13	61.4	4.55	1.93	2.43	73.51	0.	0.	82.42	1.402	-65.	-69	0		
29112 GTRA16	DISTILL	52.	8.05	0.322	0.13	163.5	12.11	5.15	4.87	159.80	0.	-74.13	107.80	1.634	-193.	0	57		
29112 GTR208	DISTILL	52.	1.00	0.115	0.13	58.2	4.31	1.83	2.35	73.36	0.	0.	81.85	1.392	-62.	-59	0		
29112 GTR208	DISTILL	52.	6.41	0.306	0.13	119.3	8.84	3.76	3.72	138.76	0.	-56.88	98.20	1.671	-142.	0	56		
29112 GTR212	DISTILL	52.	1.00	0.115	0.13	59.0	4.37	1.86	2.37	73.36	0.	0.	81.96	1.394	-63.	-61	0		
29112 GTR212	DISTILL	52.	6.88	0.313	0.13	128.7	9.53	4.05	3.97	144.47	0.	-61.84	100.18	1.704	-153.	0	57		
29112 GTR216	DISTILL	52.	1.00	0.117	0.13	60.2	4.46	1.90	2.40	73.19	0.	0.	81.93	1.394	-63.	-64	0		
29112 GTR216	DISTILL	52.	7.09	0.321	0.13	139.0	10.29	4.38	4.23	145.77	0.	-64.04	100.62	1.712	-159.	0	57		
29112 GTRW08	DISTILL	52.	1.00	0.090	0.13	62.5	4.63	1.97	2.46	75.44	0.	0.	84.50	1.437	-73.	-78	0		
29112 GTRW08	DISTILL	52.	11.00	0.275	0.13	159.9	11.84	5.03	4.87	217.17	0.	-105.18	133.73	2.275	-272.	0	57		
29112 GTRW12	DISTILL	52.	1.00	0.100	0.13	62.5	4.63	1.97	2.45	74.64	0.	0.	83.69	1.424	-70.	-76	0		
29112 GTRW12	DISTILL	52.	10.82	0.303	0.13	158.1	11.71	4.98	4.81	206.01	0.	-103.30	124.20	2.113	-242.	0	57		
29112 GTRW16	DISTILL	52.	1.00	0.103	0.13	59.8	4.43	1.88	2.39	74.38	0.	0.	83.08	1.413	-67.	-66	0		
29112 GTRW16	DISTILL	52.	9.73	0.306	0.13	153.3	11.36	4.83	4.66	188.81	0.	-91.79	117.86	2.005	-220.	0	57		
29112 GTR308	DISTILL	52.	1.00	0.082	0.13	58.0	4.30	1.83	2.36	76.12	0.	0.	84.60	1.439	-71.	-64	0		
29112 GTR308	DISTILL	52.	8.17	0.233	0.13	130.0	9.63	4.09	4.07	182.67	0.	-75.43	125.03	2.127	-231.	0	56		
29112 GTR312	DISTILL	52.	1.00	0.108	0.13	57.8	4.28	1.82	2.34	73.95	0.	0.	82.39	1.402	-64.	-59	0		
29112 GTR312	DISTILL	52.	8.08	0.307	0.13	129.7	9.60	4.08	4.03	163.84	0.	-74.53	107.02	1.821	-174.	0	56		
29112 GTR316	DISTILL	52.	1.00	0.108	0.13	58.7	4.35	1.85	2.36	73.99	0.	0.	82.55	1.404	-65.	-61	0		
29112 GTR316	DISTILL	52.	7.94	0.304	0.13	133.3	9.87	4.20	4.12	162.38	0.	-73.03	107.53	1.829	-178.	0	57		
29112 FCPADS	DISTILL	52.	1.00	0.085	0.13	77.8	5.76	2.45	7.71	75.85	0.	0.	91.78	1.561	-103.	999	0		
29112 FCPADS	DISTILL	52.	16.79	0.279	0.13	459.1	34.01	14.46	96.88	306.31	0.	-166.16	285.50	4.857	-901.	0	59		
29112 FCNCDS	DISTILL	52.	1.00	0.114	0.13	79.6	5.90	2.51	7.36	73.47	0.	0.	89.24	1.518	-96.	0	56		
29112 FCNCDS	DISTILL	52.	13.28	0.360	0.13	397.3	29.43	12.51	72.32	223.49	0.	-129.24	208.51	3.547	-627.	0	60		
29113 ONCCGN	COAL-FG	126.	0.	0.	0.14	167.8	12.73	5.41	7.69	66.22	42.49	0.	134.54	1.000	0.	0	0		
29113 STM141	RESIDUA	126.	1.00	0.170	0.14	100.3	7.61	3.24	3.75	130.17	0.	0.	144.77	1.076	1.	-14	0		
29113 STM141	RESIDUA	126.	1.16	0.189	0.14	96.1	7.29	3.10	3.30	132.72	0.	-4.03	142.38	1.058	10.	-12	0		
29113 STM141	COAL-FG	126.	1.00	0.170	0.14	202.1	15.33	6.52	9.85	75.58	0.	0.	107.28	0.797	69.	45	3		
29113 STM141	COAL-FG	126.	1.16	0.189	0.14	206.5	15.67	6.66	9.50	77.06	0.	-4.03	104.86	0.779	74.	44	3		
29113 STM141	COAL-AF	126.	1.00	0.170	0.14	150.5	11.42	4.86	9.51	75.58	0.	0.	101.37	0.753	112.	999	0		
29113 STM141	COAL-AF	126.	1.16	0.189	0.14	145.2	11.02	4.69	9.10	77.06	0.	-4.03	97.84	0.727	126.	999	0		
29113 STN080	RESIDUA	126.	0.78	0.133	0.14	84.5	6.41	2.73	3.00	126.61	9.39	0.	148.14	1.101	-2.	-15	0		
29113 STN080	COAL-FG	126.	0.78	0.133	0.14	182.0	13.81	5.87	8.49	73.51	9.39	0.	111.07	0.826	67.	82	2		
29113 STN080	COAL-AF	126.	0.78	0.133	0.14	137.8	10.46	4.45	8.70	73.51	9.39	0.	106.50	0.792	102.	999	0		
29113 PFBSTM	COAL-PF	126.	1.00	0.165	0.14	174.4	13.24	5.63	12.85	76.03	0.	0.	107.75	0.801	80.	179	1		
29113 PFBSTM	COAL-PF	126.	2.05	0.263	0.14	191.1	14.50	6.16	17.06	86.32	0.	-26.74	97.30	0.723	104.	78	2		
29113 TISTMT	RESIDUA	126.	1.00	0.167	0.14	251.8	19.11	8.13	7.71	130.64	0.	0.	165.59	1.231	-137.	0	58		
29113 TISTMT	RESIDUA	126.	2.80	0.314	0.14	566.8	43.01	18.29	15.39	160.54	0.	-45.93	191.29	1.422	-369.	0	71		
29113 TISTMT	COAL	126.	1.00	0.167	0.14	352.7	26.77	11.38	13.55	75.86	0.	0.	127.55	0.948	-67.	8	10		
29113 TISTMT	COAL	126.	2.80	0.314	0.14	715.0	54.26	23.07	22.61	93.21	0.	-45.93	147.21	1.094	-302.	3	18		
29113 TIHRSG	RESIDUA	126.	1.00	0.095	0.14	368.9	27.32	11.62	10.45	142.00	0.	0.	191.39	1.423	-270.	0	60		
29113 TIHRSG	RESIDUA	126.	1.64	0.132	0.14	545.4	40.40	17.17	14.47	159.97	0.	-16.39	215.62	1.603	-428.	0	62		
29113 TIHRSG	COAL	126.	1.00	0.095	0.14	496.2	37.65	16.01	17.30	82.45	0.	0.	153.41	1.140	-217.	0	999		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GANDM FUEL PURCHD REVNUE TOTAL	FUEL REQD		GEN/ REQD	/HEAT COST	RATIO *10**6		INSNC	ELEC	WORTH	ROI	GROSS						
SYSTEM	FUEL	MW									15%	%	PAY BACK						
29113 TIHRSO	COAL	126.	1.64	0.132	0.14	693.2	52.60	22.37	21.96	92.88	0.	-16.39	173.43	1.289	-374.	0	999		
29113 STIRL	DISTILL	126.	1.00	0.115	0.14	167.0	12.37	5.26	5.52	170.24	0.	0.	193.38	1.437	-182.	999	0		
29113 STIRL	DISTILL	126.	3.15	0.228	0.14	284.5	21.07	8.96	8.19	235.75	0.	-54.87	219.09	1.628	-317.	0	57		
29113 STIRL	RESIDUA	126.	1.00	0.115	0.14	167.2	12.38	5.26	5.52	138.88	0.	0.	162.04	1.204	-84.	999	0		
29113 STIRL	RESIDUA	126.	3.15	0.228	0.14	284.9	21.10	8.97	8.20	192.32	0.	-54.87	175.72	1.306	-182.	0	58		
29113 STIRL	COAL	126.	1.00	0.115	0.14	295.2	21.87	9.30	12.33	80.64	0.	0.	124.13	0.923	-25.	11	8		
29113 STIRL	COAL	126.	3.15	0.228	0.14	524.2	38.83	16.51	18.69	111.67	0.	-54.87	130.82	0.972	-154.	6	12		
29113 HEGT60	COAL-AF	126.	1.00	0.005	0.14	286.7	21.76	9.25	12.73	90.62	0.	0.	134.35	0.999	-57.	5	13		
29113 HEGT60	COAL-AF	126.	10.48	0.015	0.14	1279.6	97.10	41.28	51.49	321.90	0.	-241.67	270.11	2.008	-960.	0	83		
29113 HEGT00	COAL-AF	126.	1.00	0.049	0.14	256.3	19.45	8.27	12.09	86.61	0.	0.	126.42	0.940	-17.	11	8		
29113 HEGT00	COAL-AF	126.	2.67	0.090	0.14	387.4	29.40	12.50	17.45	120.65	0.	-42.55	137.45	1.022	-115.	4	16		
29113 FCMCCL	COAL	126.	1.00	0.145	0.14	272.8	21.21	9.02	14.12	77.90	0.	0.	122.25	0.909	-16.	12	8		
29113 FCMCCL	COAL	126.	4.57	0.335	0.14	367.0	28.54	12.13	27.43	119.58	0.	-90.99	96.68	0.719	17.	16	6		
29113 FCSTCL	COAL	126.	1.00	0.151	0.14	269.6	20.96	8.91	13.65	77.37	0.	0.	120.90	0.899	-10.	13	7		
29113 FCSTCL	COAL	126.	6.42	0.390	0.14	430.9	33.50	14.24	32.01	137.77	0.	-138.08	79.44	0.590	39.	17	6		
29113 IGGTST	COAL	126.	1.00	0.117	0.14	255.8	19.89	8.46	10.27	80.41	0.	0.	119.02	0.885	3.	15	6		
29113 IGGTST	COAL	126.	4.38	0.267	0.14	419.5	32.62	13.87	12.06	128.34	0.	-86.12	100.76	0.749	-19.	13	7		
29113 GTSOAR	RESIDUA	126.	1.00	0.110	0.14	129.3	9.57	4.07	4.44	139.65	0.	0.	157.73	1.172	-52.	-34	0		
29113 GTSOAR	RESIDUA	126.	5.27	0.267	0.14	228.6	16.94	7.20	6.70	248.88	0.	-108.80	170.92	1.270	-140.	0	57		
29113 GTAC08	RESIDUA	126.	1.00	0.146	0.14	115.4	8.54	3.63	4.08	134.00	0.	0.	150.25	1.117	-22.	-21	0		
29113 GTAC08	RESIDUA	126.	3.70	0.311	0.14	153.0	11.33	4.82	4.71	187.90	0.	-68.90	139.87	1.040	-7.	-21	0		
29113 GTAC12	RESIDUA	126.	1.00	0.143	0.14	119.2	8.83	3.75	4.17	134.50	0.	0.	151.25	1.124	-27.	-23	0		
29113 GTAC12	RESIDUA	126.	4.66	0.332	0.14	188.3	13.95	5.93	5.63	209.37	0.	-93.32	141.56	1.052	-29.	0	57		
29113 GTAC16	RESIDUA	126.	1.00	0.137	0.14	125.8	9.31	3.96	4.33	135.41	0.	0.	153.01	1.137	-36.	-27	0		
29113 GTAC16	RESIDUA	126.	5.41	0.336	0.14	225.1	16.67	7.09	6.58	229.68	0.	-112.54	147.48	1.096	-65.	0	60		
29113 GTWC16	RESIDUA	126.	1.00	0.128	0.14	121.6	9.01	3.83	4.23	136.80	0.	0.	153.87	1.144	-37.	-26	0		
29113 GTWC16	RESIDUA	126.	5.50	0.316	0.14	191.3	14.17	6.02	5.75	239.09	0.	-114.64	150.40	1.118	-58.	0	56		
29113 CC1626	RESIDUA	126.	1.00	0.125	0.14	122.1	9.26	3.94	4.38	137.29	0.	0.	154.87	1.151	-41.	-29	0		
29113 CC1626	RESIDUA	126.	8.13	0.344	0.14	258.3	19.60	8.33	7.86	303.01	0.	-181.79	157.02	1.167	-113.	0	61		
29113 CC1622	RESIDUA	126.	1.00	0.131	0.14	125.3	9.51	4.04	4.43	136.31	0.	0.	154.29	1.147	-41.	-30	0		
29113 CC1622	RESIDUA	126.	7.30	0.352	0.14	275.7	20.92	8.90	8.02	276.53	0.	-160.62	153.75	1.143	-112.	0	64		
29113 CC1222	RESIDUA	126.	1.00	0.132	0.14	122.9	9.33	3.97	4.40	136.11	0.	0.	153.80	1.143	-39.	-28	0		
29113 CC1222	RESIDUA	126.	7.25	0.355	0.14	256.0	19.43	8.26	7.75	274.03	0.	-159.40	150.07	1.115	-9.	0	64		
29113 CC0822	RESIDUA	126.	1.00	0.142	0.14	120.5	9.15	3.89	4.35	134.60	0.	0.	151.98	1.130	-32.	-25	0		
29113 CC0822	RESIDUA	126.	5.72	0.355	0.14	199.4	15.13	6.43	6.24	231.58	0.	-120.30	139.07	1.034	-29.	0	65		
29113 DEHTPM	RESIDUA	126.	1.00	0.120	0.14	192.4	14.25	6.06	6.23	138.10	0.	0.	164.64	1.224	-104.	0	56		
29113 DEHTPM	RESIDUA	126.	4.63	0.278	0.14	483.4	35.80	15.22	13.41	225.47	0.	-92.60	197.31	1.467	-342.	0	63		
29113 GTSOAD	DISTILL	126.	1.00	0.134	0.14	117.0	8.67	3.69	4.12	166.61	0.	0.	183.08	1.361	-126.	-50	0		
29113 GTSOAD	DISTILL	126.	4.55	0.309	0.14	162.7	12.05	5.12	5.00	261.84	0.	-90.56	193.45	1.438	-180.	999	0		
29113 GTRA08	DISTILL	126.	1.00	0.110	0.14	132.9	9.84	4.19	4.51	171.07	0.	0.	189.61	1.409	-154.	-73	0		
29113 GTRA08	DISTILL	126.	8.06	0.311	0.14	361.2	26.75	11.37	10.13	416.95	0.	-200.45	264.76	1.968	-496.	0	57		
29113 GTRA12	DISTILL	126.	1.00	0.116	0.14	129.4	9.58	4.07	4.42	169.96	0.	0.	188.04	1.398	-147.	-66	0		
29113 GTRA12	DISTILL	126.	8.34	0.322	0.14	345.6	25.60	10.88	9.72	391.46	0.	-187.22	250.43	1.861	-444.	0	57		
29113 GTRA16	DISTILL	126.	1.00	0.119	0.14	131.6	9.74	4.14	4.47	169.48	0.	0.	187.84	1.396	-148.	-69	0		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDH	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC			ELEC							WORTH	%	PAY	BACK
		MW														15%			
29113 GTRA16	DISTILL	126.	7.58	0.322	0.14	338.1	25.04	10.65	9.50	364.69	0.	-167.70	242.18	1.800	-415.	0	57		
29113 GTR208	DISTILL	126.	1.00	0.121	0.14	129.2	9.57	4.07	4.42	169.12	0.	0.	187.17	1.391	-145.	-65	0		
29113 GTR208	DISTILL	126.	6.03	0.306	0.14	248.5	18.41	7.83	7.21	316.66	0.	-128.31	221.79	1.648	-309.	0	56		
29113 GTR212	DISTILL	126.	1.00	0.121	0.14	126.7	9.38	3.99	4.36	169.12	0.	0.	186.85	1.389	-142.	-62	0		
29113 GTR212	DISTILL	126.	6.48	0.313	0.14	269.0	19.93	8.47	7.74	329.69	0.	-139.65	226.18	1.681	-332.	0	57		
29113 GTR216	DISTILL	126.	1.00	0.123	0.14	129.5	9.59	4.08	4.42	168.70	0.	0.	186.78	1.388	-144.	-65	0		
29113 GTR216	DISTILL	126.	6.68	0.321	0.14	292.2	21.65	9.20	8.32	332.65	0.	-144.67	227.15	1.688	-346.	0	57		
29113 GTRW08	DISTILL	126.	1.00	0.094	0.14	127.0	9.41	4.00	4.37	174.15	0.	0.	191.93	1.427	-159.	-67	0		
29113 GTRW08	DISTILL	126.	10.36	0.275	0.14	347.3	25.73	10.94	9.85	495.59	0.	-238.55	303.57	2.256	-611.	0	57		
29113 GTRW12	DISTILL	126.	1.00	0.104	0.14	126.9	9.40	4.00	4.36	172.22	0.	0.	189.97	1.412	-152.	-65	0		
29113 GTRW12	DISTILL	126.	10.19	0.303	0.14	335.3	24.84	10.56	9.53	470.12	0.	-234.25	280.80	2.087	-534.	0	57		
29113 GTRW16	DISTILL	126.	1.00	0.108	0.14	130.2	9.64	4.10	4.44	171.58	0.	0.	189.77	1.410	-153.	-69	0		
29113 GTRW16	DISTILL	126.	9.16	0.306	0.14	318.3	23.58	10.02	9.07	430.87	0.	-207.99	265.56	1.974	-479.	0	57		
29113 GTR308	DISTILL	126.	1.00	0.086	0.14	121.6	9.01	3.83	4.25	175.81	0.	0.	192.89	1.434	-159.	-62	0		
29113 GTR308	DISTILL	126.	7.69	0.233	0.14	259.9	19.25	8.19	7.60	416.87	0.	-170.66	281.25	2.090	-501.	0	56		
29113 GTR312	DISTILL	126.	1.00	0.113	0.14	123.2	9.13	3.68	4.27	170.55	0.	0.	187.83	1.396	-144.	-59	0		
29113 GTR312	DISTILL	126.	7.61	0.307	0.14	261.4	19.36	8.23	7.59	373.88	0.	-168.59	240.48	1.787	-373.	0	56		
29113 GTR316	DISTILL	126.	1.00	0.113	0.14	124.8	9.24	3.93	4.31	170.66	0.	0.	188.13	1.398	-146.	-61	0		
29113 GTR316	DISTILL	126.	7.48	0.304	0.14	269.4	19.96	8.48	7.79	370.55	0.	-165.18	241.61	1.796	-381.	0	56		
29113 FCPADS	DISTILL	126.	1.00	0.089	0.14	170.6	12.63	5.37	17.46	175.16	0.	0.	210.62	1.566	-239.	999	0		
29113 FCPADS	DISTILL	126.	15.82	0.279	0.14	1007.8	74.64	31.73	219.61	699.03	0.	-377.70	647.32	4.811	-2026.	0	59		
29113 FCMCDS	DISTILL	126.	1.00	0.119	0.14	175.4	12.99	5.52	16.62	169.39	0.	0.	204.53	1.520	-222.	0	56		
29113 FCMCDS	DISTILL	126.	12.51	0.360	0.14	880.1	65.19	27.71	163.96	510.02	0.	-293.45	473.43	3.519	-1414.	0	60		
33121 OMCCGN	COAL-AF	60.	0.	0.	2.20	7.4	0.56	0.24	0.65	1.55	15.47	0.	18.47	1.000	0.	0	0		
33121 STM141	RESIDUA	60.	0.05	0.027	2.20	5.4	0.41	0.17	0.45	2.96	14.70	0.	18.69	1.012	0.	-12	0		
33121 STM141	COAL-FG	60.	0.05	0.027	2.20	10.8	0.82	0.35	0.80	1.72	14.70	0.	18.39	0.995	-1.	7	11		
33121 STM141	COAL-AF	60.	0.05	0.027	2.20	8.5	0.64	0.27	0.70	1.72	14.70	0.	18.04	0.976	1.	27	4		
33121 STM088	RESIDUA	60.	0.03	0.014	2.20	4.6	0.35	0.15	0.42	2.83	15.05	0.	18.81	1.018	0.	-13	0		
33121 STM088	COAL-FG	60.	0.03	0.014	2.20	9.8	0.75	0.32	0.76	1.64	15.05	0.	18.52	1.003	-1.	3	17		
33121 STM088	COAL-AF	60.	0.03	0.014	2.20	7.9	0.60	0.26	0.67	1.64	15.05	0.	18.23	0.987	1.	30	4		
33121 PFB3TH	COAL-PF	60.	0.11	0.054	2.20	13.8	1.05	0.45	1.00	1.93	13.84	0.	18.27	0.989	-2.	7	11		
33121 T1STMT	RESIDUA	60.	0.15	0.078	2.20	30.3	2.30	0.98	1.09	3.58	13.15	0.	21.10	1.142	-19.	0	85		
33121 T1STMT	COAL	60.	0.15	0.078	2.20	38.7	2.94	1.25	1.53	2.08	13.15	0.	20.94	1.134	-23.	0	999		
33121 TIHRSG	RESIDUA	60.	0.10	0.033	2.20	29.8	2.20	0.94	0.98	3.68	13.87	0.	21.67	1.173	-20.	0	69		
33121 TIHRSG	COAL	60.	0.10	0.033	2.20	38.3	2.91	1.24	1.43	2.14	13.87	0.	21.58	1.168	-25.	0	116		
33121 STIRL	DISTILL	60.	0.21	0.077	2.20	10.5	0.78	0.33	0.57	5.58	12.22	0.	19.47	1.054	-4.	0	58		
33121 STIRL	RESIDUA	60.	0.21	0.077	2.20	10.5	0.78	0.33	0.57	4.55	12.22	0.	18.45	0.999	-1.	6	12		
33121 STIRL	COAL	60.	0.21	0.077	2.20	17.9	1.33	0.57	1.01	2.64	12.22	0.	17.76	0.961	-3.	10	9		
33121 HEGT60	COAL-AF	60.	0.53	0.029	2.20	61.4	4.66	1.98	2.28	6.51	6.47	0.	21.90	1.185	-37.	0	999		
33121 HEGT60	COAL-AF	60.	0.17	0.027	2.20	26.7	2.02	0.86	1.11	2.80	12.85	0.	19.64	1.063	-13.	0	999		
33121 FCNCL	COAL	60.	0.29	0.133	2.20	30.7	2.39	1.02	1.50	2.79	10.94	0.	18.64	1.009	-12.	4	14		
33121 FCSTCL	COAL	60.	0.37	0.174	2.20	34.3	2.67	1.13	1.75	3.08	9.70	0.	18.32	0.992	-13.	5	13		
33121 IGGTST	COAL	60.	0.25	0.087	2.20	28.1	2.18	0.93	1.25	2.86	11.65	0.	18.87	1.021	-11.	3	17		
33121 GTSOAR	RESIDUA	60.	0.33	0.117	2.20	11.4	0.84	0.36	0.56	5.70	10.34	0.	17.81	0.964	0.	16	6		

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	OANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/	/HEAT COST										WORTH	%	PAY			
		MW	REQD	RATIO *10**6	INSNC									15%		BACK			
33121	GTAC08	RESIDUA	60.	0.24	0.108	2.20	8.3	0.62	0.26	0.46	4.39	11.80	0.	17.53	0.949	3.	67	2	
33121	GTAC12	RESIDUA	60.	0.30	0.133	2.20	9.7	0.72	0.30	0.50	4.90	10.84	0.	17.26	0.935	3.	36	3	
33121	GTAC16	RESIDUA	60.	0.35	0.149	2.20	11.1	0.82	0.35	0.55	5.35	10.12	0.	17.18	0.930	2.	26	4	
33121	GTWC16	RESIDUA	60.	0.35	0.141	2.20	11.3	0.83	0.35	0.56	5.59	10.01	0.	17.35	0.939	2.	23	5	
33121	CC1626	RESIDUA	60.	0.48	0.183	2.20	13.7	1.04	0.44	0.75	6.76	8.09	0.	17.08	0.925	1.	18	6	
33121	CC1622	RESIDUA	60.	0.43	0.173	2.20	12.9	0.98	0.41	0.71	6.17	8.87	0.	17.14	0.928	2.	19	5	
33121	CC1222	RESIDUA	60.	0.42	0.173	2.20	12.2	0.92	0.39	0.70	6.11	8.93	0.	17.05	0.923	2.	22	5	
33121	CC0822	RESIDUA	60.	0.33	0.144	2.20	10.5	0.80	0.34	0.64	5.16	10.38	0.	17.31	0.937	2.	26	4	
33121	DEADV3	RESIDUA	60.	0.99	0.262	2.20	40.1	2.97	1.26	1.46	13.31	0.16	0.	19.16	1.037	-17.	3	17	
33121	DEHTPM	RESIDUA	60.	0.31	0.121	2.20	17.0	1.26	0.53	0.80	5.29	10.69	0.	18.57	1.005	-5.	4	15	
33121	DESOA3	DISTILL	60.	1.00	0.218	2.20	51.1	3.79	1.61	1.87	17.50	0.	0.	24.76	1.341	-40.	0	70	
33121	DESOA3	DISTILL	60.	1.20	0.224	2.20	59.8	4.43	1.88	1.99	20.39	0.	-1.89	26.80	1.451	-51.	0	67	
33121	DESOA3	RESIDUA	60.	1.00	0.218	2.20	51.1	3.79	1.61	1.87	14.27	0.	0.	21.54	1.166	-30.	0	999	
33121	DESOA3	RESIDUA	60.	1.20	0.224	2.20	59.8	4.43	1.88	1.99	16.63	0.	-1.89	23.05	1.248	-39.	0	269	
33121	GTSCAD	DISTILL	60.	0.29	0.122	2.20	8.8	0.65	0.28	0.48	6.11	10.96	0.	18.48	1.000	-1.	4	13	
33121	GTRA08	DISTILL	60.	0.55	0.194	2.20	16.0	1.19	0.50	0.71	9.35	7.03	0.	18.78	1.017	-5.	1	23	
33121	GTRA12	DISTILL	60.	0.52	0.193	2.20	15.8	1.17	0.50	0.70	8.86	7.45	0.	18.67	1.011	-4.	2	18	
33121	GTRA16	DISTILL	60.	0.47	0.180	2.20	15.7	1.16	0.49	0.69	8.31	8.13	0.	18.79	1.017	-5.	1	24	
33121	GTR208	DISTILL	60.	0.38	0.146	2.20	12.1	0.89	0.38	0.58	7.29	9.57	0.	18.72	1.013	-3.	0	999	
33121	GTR212	DISTILL	60.	0.41	0.157	2.20	13.0	0.96	0.41	0.61	7.59	9.14	0.	18.71	1.013	-3.	0	28	
33121	GTR216	DISTILL	60.	0.42	0.164	2.20	13.8	1.02	0.43	0.63	7.64	8.96	0.	18.69	1.012	-4.	1	22	
33121	GTRW08	DISTILL	60.	0.64	0.194	2.20	17.4	1.29	0.55	0.76	11.18	5.55	0.	19.32	1.046	-7.	0	201	
33121	GTRW12	DISTILL	60.	0.64	0.212	2.20	17.2	1.28	0.54	0.75	10.69	5.63	0.	18.89	1.023	-6.	0	27	
33121	GTRW16	DISTILL	60.	0.58	0.197	2.20	16.9	1.25	0.53	0.74	9.87	6.56	0.	18.95	1.026	-6.	0	999	
33121	GTR308	DISTILL	60.	0.48	0.133	2.20	13.9	1.03	0.44	0.66	9.50	8.03	0.	19.64	1.063	-7.	0	63	
33121	GTR312	DISTILL	60.	0.48	0.173	2.20	13.9	1.03	0.44	0.65	8.66	7.98	0.	18.75	1.015	-4.	0	28	
33121	GTR316	DISTILL	60.	0.48	0.169	2.20	14.3	1.06	0.45	0.66	8.59	8.11	0.	18.87	1.021	-4.	0	999	
33121	FCPADS	DISTILL	60.	1.00	0.279	2.20	36.3	2.69	1.14	5.62	16.15	0.	0.	25.60	1.386	-36.	0	65	
33121	FCPADS	DISTILL	60.	1.02	0.279	2.20	36.8	2.73	1.16	5.64	16.35	0.	-0.14	25.73	1.393	-37.	0	65	
33121	FCHCDS	DISTILL	60.	0.80	0.299	2.20	31.4	2.33	0.99	4.26	11.93	3.04	0.	22.55	1.221	-24.	0	75	
33251	ONOCGN	COAL-FG	280.	0.	0.	1.05	53.1	4.03	1.71	2.64	7.69	72.21	0.	88.29	1.000	0.	0	0	
33251	STM141	RESIDUA	280.	0.11	0.056	1.05	31.6	2.40	1.02	1.41	16.15	64.57	0.	85.55	0.969	19.	999	0	
33251	STM141	COAL-FG	280.	0.11	0.056	1.05	62.1	4.72	2.00	3.13	9.38	64.57	0.	83.80	0.949	10.	31	4	
33251	STM141	COAL-AF	280.	0.11	0.056	1.05	42.3	3.21	1.36	2.78	9.38	64.57	0.	81.30	0.921	27.	999	0	
33251	STM000	RESIDUA	280.	0.06	0.031	1.05	28.1	2.13	0.91	1.31	14.83	68.03	0.	87.22	0.988	15.	-1	0	
33251	STM080	COAL-FG	280.	0.06	0.031	1.05	57.6	4.37	1.86	2.92	8.61	68.03	0.	85.79	0.972	6.	34	3	
33251	STM088	COAL-AF	280.	0.06	0.031	1.05	40.1	3.04	1.29	2.67	8.61	68.03	0.	83.65	0.947	21.	999	0	
33251	PFBSTH	COAL-PF	280.	0.22	0.112	1.05	62.0	4.71	2.00	4.80	11.49	56.14	0.	79.13	0.896	24.	54	2	
33251	TISTMT	RESIDUA	280.	0.16	0.083	1.05	113.0	8.58	3.65	3.78	17.79	60.63	0.	94.42	1.069	-48.	0	105	
33251	TISTMT	COAL	280.	0.32	0.164	1.05	211.4	16.04	6.82	6.99	12.90	49.35	0.	92.10	1.043	-88.	3	18	
33251	TIHRSG	RESIDUA	280.	0.11	0.035	1.05	111.7	8.27	3.52	3.60	18.30	64.23	0.	97.92	1.109	-57.	0	66	
33251	TIHRSG	COAL	280.	0.22	0.069	1.05	210.7	15.99	6.80	6.88	13.49	56.45	0.	99.59	1.128	-111.	0	999	
33251	STIRL	DISTILL	280.	0.22	0.081	1.05	65.9	4.88	2.07	2.58	27.72	56.03	0.	93.28	1.057	-21.	0	58	
33251	STIRL	RESIDUA	280.	0.22	0.081	1.05	65.9	4.88	2.08	2.58	22.61	56.03	0.	88.18	0.999	-5.	8	12	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDH	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC							WORTH	%	PAY			
		MW												15%		BACK			
33251	STIRL	COAL	280.	0.44	0.159	1.05	167.2	12.39	5.27	6.16	18.43	40.26	0.	82.50	0.934	-35.	9	10	
33251	HEGT60	COAL-AF	280.	1.00	0.049	1.05	279.5	21.21	9.02	11.27	47.48	0.	0.	88.98	1.008	-111.	5	14	
33251	HEGT60	COAL-AF	280.	1.22	0.051	1.05	376.5	28.57	12.15	13.86	56.35	0.	-9.66	101.27	1.147	-196.	1	24	
33251	HEGT00	COAL-AF	280.	0.36	0.057	1.05	134.2	10.19	4.33	5.53	19.93	46.44	0.	86.41	0.979	-33.	7	11	
33251	FCMCL	COAL	280.	0.62	0.127	1.05	160.3	12.46	5.30	8.67	27.38	27.75	0.	81.56	0.924	-33.	9	9	
33251	FCSTCL	COAL	280.	0.79	0.214	1.05	179.1	13.92	5.92	9.73	30.19	15.51	0.	75.28	0.853	-22.	11	8	
33251	IGGTST	COAL	280.	0.52	0.032	1.05	142.1	11.04	4.70	4.63	28.09	34.62	0.	83.08	0.941	-28.	9	9	
33251	GTSOAR	RESIDUA	280.	0.35	0.123	1.05	55.1	4.08	1.74	2.26	28.34	46.73	0.	83.14	0.942	16.	999	1	
33251	GTAC08	RESIDUA	280.	0.25	0.114	1.05	45.5	3.37	1.43	1.97	21.83	53.94	0.	82.53	0.935	22.	999	0	
33251	GTAC12	RESIDUA	280.	0.32	0.141	1.05	51.2	3.79	1.61	2.13	24.33	49.20	0.	81.06	0.918	24.	999	0	
33251	GTAC16	RESIDUA	280.	0.37	0.157	1.05	56.5	4.18	1.78	2.28	26.56	45.60	0.	80.41	0.911	24.	178	1	
33251	GTWC16	RESIDUA	280.	0.38	0.149	1.05	53.8	3.98	1.69	2.22	27.78	45.07	0.	80.75	0.915	24.	999	0	
33251	CC1626	RESIDUA	280.	1.00	0.232	1.05	86.4	6.56	2.79	3.09	66.07	0.	0.	78.51	0.889	15.	22	5	
33251	CC1626	RESIDUA	280.	0.51	0.194	1.05	61.4	4.66	1.98	2.60	33.60	35.49	0.	78.33	0.887	27.	63	2	
33251	CC1622	RESIDUA	280.	0.46	0.182	1.05	62.2	4.72	2.01	2.57	30.69	39.34	0.	79.33	0.899	24.	53	2	
33251	CC1222	RESIDUA	280.	0.45	0.182	1.05	59.6	4.52	1.92	2.53	30.38	39.63	0.	78.99	0.895	26.	73	2	
33251	CC0922	RESIDUA	280.	0.35	0.153	1.05	49.5	3.76	1.60	2.24	25.68	46.85	0.	80.13	0.908	27.	999	0	
33251	DEADV3	RESIDUA	280.	1.00	0.262	1.05	198.4	14.69	6.25	6.14	63.44	0.	0.	90.52	1.025	-74.	4	16	
33251	DEADV3	RESIDUA	280.	1.05	0.265	1.05	207.3	15.35	6.53	6.37	66.13	0.	-2.32	92.06	1.043	-83.	2	18	
33251	DEHTPM	RESIDUA	280.	0.33	0.127	1.05	97.2	7.20	3.06	3.49	26.27	48.43	0.	88.44	1.002	-20.	5	14	
33251	DESQA3	DISTILL	280.	1.00	0.216	1.05	244.0	18.07	7.68	7.31	82.63	0.	0.	115.69	1.310	-175.	0	70	
33251	DESQA3	DISTILL	280.	1.28	0.224	1.05	303.5	22.48	9.56	8.85	101.28	0.	-12.17	129.99	1.472	-247.	0	66	
33251	DESQA3	RESIDUA	280.	1.00	0.216	1.05	244.0	18.07	7.68	7.31	67.41	0.	0.	100.47	1.138	-127.	0	999	
33251	DESQA3	RESIDUA	280.	1.28	0.224	1.05	303.5	22.48	9.56	8.85	82.62	0.	-12.17	111.33	1.261	-189.	0	152	
33251	GTQUAD	DISTILL	280.	0.31	0.129	1.05	47.2	3.49	1.49	2.04	30.36	49.79	0.	87.16	0.987	7.	999	0	
33251	GTRA06	DISTILL	280.	1.00	0.242	1.05	107.8	7.99	3.40	3.61	79.96	0.	0.	94.95	1.076	-46.	0	76	
33251	GTRA08	DISTILL	280.	0.58	0.205	1.05	79.3	5.87	2.50	2.92	46.47	30.24	0.	88.00	0.997	-11.	6	12	
33251	GTRA12	DISTILL	280.	1.00	0.244	1.05	108.2	8.02	3.41	3.59	79.73	0.	0.	94.75	1.073	-45.	0	78	
33251	GTRA12	DISTILL	280.	0.55	0.204	1.05	76.9	5.70	2.42	2.85	44.03	32.33	0.	87.33	0.989	-7.	8	10	
33251	GTRA16	DISTILL	280.	0.50	0.190	1.05	76.4	5.66	2.41	2.82	41.30	35.75	0.	87.94	0.996	-9.	6	12	
33251	GTR208	DISTILL	280.	0.41	0.154	1.05	58.3	4.32	1.83	2.34	36.21	42.90	0.	87.60	0.992	0.	16	6	
33251	GTR212	DISTILL	280.	0.44	0.165	1.05	61.5	4.55	1.94	2.43	37.68	40.75	0.	87.35	0.989	-0.	14	7	
33251	GTR216	DISTILL	280.	0.45	0.173	1.05	64.9	4.81	2.04	2.52	37.97	39.84	0.	87.18	0.987	-1.	12	8	
33251	GTRW08	DISTILL	280.	1.00	0.229	1.05	94.4	6.99	2.97	3.35	81.32	0.	0.	94.63	1.072	-39.	0	67	
33251	GTRW08	DISTILL	280.	0.68	0.205	1.05	80.4	5.95	2.53	2.98	55.53	22.90	0.	89.90	1.018	-17.	0	999	
33251	GTRW12	DISTILL	280.	1.00	0.256	1.05	94.1	6.97	2.96	3.33	78.42	0.	0.	91.68	1.038	-29.	0	311	
33251	GTRW12	DISTILL	280.	0.68	0.223	1.05	79.9	5.92	2.52	2.96	53.11	23.30	0.	87.81	0.995	-10.	6	11	
33251	GTRW16	DISTILL	280.	1.00	0.242	1.05	96.8	7.17	3.05	3.36	79.96	0.	0.	93.54	1.059	-36.	0	76	
33251	GTRW16	DISTILL	280.	0.61	0.208	1.05	70.9	5.25	2.23	2.72	49.05	27.91	0.	87.16	0.987	-4.	10	9	
33251	GTR308	DISTILL	280.	1.00	0.127	1.05	88.9	6.58	2.80	3.04	92.08	0.	0.	104.50	1.184	-67.	0	58	
33251	GTR308	DISTILL	280.	0.51	0.140	1.05	62.4	4.63	1.97	2.50	47.18	35.21	0.	91.48	1.036	-14.	0	58	
33251	GTR312	DISTILL	280.	1.00	0.208	1.05	87.9	6.51	2.77	3.01	83.46	0.	0.	95.75	1.084	-39.	0	62	
33251	GTR312	DISTILL	280.	0.52	0.182	1.05	62.1	4.60	1.95	2.47	43.04	34.97	0.	87.04	0.986	0.	15	6	
33251	GTR316	DISTILL	280.	1.00	0.201	1.05	90.4	6.70	2.85	2.99	84.20	0.	0.	96.74	1.096	-43.	0	61	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	QANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	RATIO *10**6	INSNC			ELEC				WORTH	%	PAY				
		MW	REQD										15%		BACK				
33251	GTR316	DISTILL	280.	0.51	0.178	1.05	63.3	4.69	1.99	2.50	42.68	35.61	0.	87.47	0.991	-2.	11	8	
33251	FCPADS	DISTILL	280.	1.00	0.276	1.05	177.7	13.16	5.59	25.99	76.33	0.	0.	121.08	1.371	-163.	0	65	
33251	FCPADS	DISTILL	280.	1.08	0.279	1.05	189.7	14.05	5.97	27.97	81.20	0.	-3.51	125.69	1.424	-184.	0	64	
33251	FCMCDS	DISTILL	280.	1.00	0.343	1.05	188.0	13.92	5.92	24.59	69.28	0.	0.	113.71	1.288	-145.	0	72	
33251	FCMCDS	DISTILL	280.	0.86	0.316	1.05	165.5	12.26	5.21	21.25	59.24	10.46	0.	108.42	1.228	-117.	0	74	
33254	OMOCGN	COAL-AF	40.	0.	0.	1.50	7.3	0.55	0.24	0.64	1.52	10.32	0.	13.26	1.000	0.	0	0	
33254	STM141	RESIDUA	40.	0.07	0.037	1.50	5.3	0.41	0.17	0.44	2.90	9.56	0.	13.48	1.016	0.	-12	0	
33254	STM141	COAL-FG	40.	0.07	0.037	1.50	10.6	0.81	0.34	0.79	1.68	9.56	0.	13.18	0.994	-1.	7	11	
33254	STM141	COAL-AF	40.	0.07	0.037	1.50	8.4	0.64	0.27	0.69	1.68	9.56	0.	12.84	0.968	1.	27	4	
33254	STM088	RESIDUA	40.	0.04	0.020	1.50	4.6	0.35	0.15	0.42	2.77	9.90	0.	13.59	1.024	0.	-12	0	
33254	STM088	COAL-FG	40.	0.04	0.020	1.50	9.7	0.73	0.31	0.76	1.61	9.90	0.	13.31	1.004	-1.	3	17	
33254	STM088	COAL-AF	40.	0.04	0.020	1.50	7.8	0.59	0.25	0.67	1.61	9.90	0.	13.02	0.982	1.	30	4	
33254	PFBSTM	COAL-PF	40.	0.15	0.074	1.50	13.6	1.03	0.44	0.99	1.89	8.72	0.	13.07	0.985	-2.	7	11	
33254	TISTMT	RESIDUA	40.	0.22	0.108	1.50	29.8	2.26	0.96	1.08	3.50	8.04	0.	15.85	1.195	-19.	0	85	
33254	TISTMT	COAL	40.	0.22	0.108	1.50	38.1	2.89	1.23	1.51	2.03	8.04	0.	15.71	1.184	-22.	0	999	
33254	TIHRSG	RESIDUA	40.	0.15	0.045	1.50	29.3	2.17	0.92	0.97	3.61	8.74	0.	16.41	1.237	-20.	0	69	
33254	TIHRSG	COAL	40.	0.15	0.045	1.50	37.7	2.86	1.22	1.41	2.09	8.74	0.	16.32	1.230	-24.	0	115	
33254	STIRL	DISTILL	40.	0.31	0.105	1.50	10.3	0.76	0.32	0.56	5.46	7.13	0.	14.23	1.073	-4.	0	58	
33254	STIRL	RESIDUA	40.	0.31	0.105	1.50	10.3	0.76	0.32	0.56	4.45	7.13	0.	13.23	0.997	-1.	6	12	
33254	STIRL	COAL	40.	0.31	0.105	1.50	17.6	1.31	0.56	0.99	2.59	7.13	0.	12.57	0.947	-3.	10	9	
33254	HEGT60	COAL-AF	40.	0.85	0.040	1.50	60.4	4.59	1.95	2.25	6.37	1.50	0.	16.66	1.256	-36.	0	999	
33254	HEGT00	COAL-AF	40.	0.25	0.038	1.50	26.3	1.99	0.85	1.09	2.74	7.74	0.	14.42	1.087	-13.	0	999	
33254	FCMCCL	COAL	40.	0.43	0.183	1.50	30.2	2.35	1.00	1.48	2.73	5.88	0.	13.44	1.014	-12.	4	14	
33254	FCSTCL	COAL	40.	0.55	0.240	1.50	33.8	2.62	1.12	1.72	3.01	4.67	0.	13.14	0.991	-13.	5	13	
33254	IGBTST	COAL	40.	0.36	0.120	1.50	27.7	2.15	0.91	1.23	2.80	6.57	0.	13.67	1.031	-11.	3	17	
33254	GTSCAR	RESIDUA	40.	0.49	0.160	1.50	11.2	0.83	0.35	0.56	5.58	5.30	0.	12.61	0.951	0.	16	6	
33254	GTAC08	RESIDUA	40.	0.35	0.149	1.50	8.2	0.61	0.26	0.46	4.30	6.72	0.	12.34	0.930	3.	69	2	
33254	GTAC12	RESIDUA	40.	0.44	0.183	1.50	9.5	0.70	0.30	0.50	4.79	5.78	0.	12.08	0.910	3.	37	3	
33254	GTAC16	RESIDUA	40.	0.51	0.204	1.50	10.9	0.81	0.34	0.54	5.23	5.08	0.	12.00	0.905	2.	26	4	
33254	GTWC16	RESIDUA	40.	0.52	0.194	1.50	11.1	0.82	0.35	0.55	5.47	4.97	0.	12.17	0.917	2.	23	5	
33254	CC1626	RESIDUA	40.	0.70	0.252	1.50	13.5	1.02	0.44	0.74	6.61	3.09	0.	11.91	0.898	1.	18	6	
33254	CC1622	RESIDUA	40.	0.63	0.237	1.50	12.6	0.96	0.41	0.70	6.04	3.85	0.	11.96	0.902	2.	19	5	
33254	CC1222	RESIDUA	40.	0.62	0.237	1.50	12.0	0.91	0.39	0.69	5.98	3.91	0.	11.88	0.895	2.	22	5	
33254	CC0822	RESIDUA	40.	0.48	0.198	1.50	10.3	0.78	0.33	0.63	5.05	5.33	0.	12.13	0.915	2.	26	4	
33254	DEADV3	RESIDUA	40.	1.00	0.248	1.50	29.2	2.16	0.92	1.28	9.78	0.	0.	14.14	1.066	-13.	1	25	
33254	DEADV3	RESIDUA	40.	1.45	0.265	1.50	39.3	2.91	1.24	1.43	13.02	0.	-2.80	15.80	1.191	-23.	0	999	
33254	DEHTPM	RESIDUA	40.	0.45	0.166	1.50	16.6	1.23	0.52	0.79	5.17	5.63	0.	13.35	1.007	-5.	4	15	
33254	DES0A3	DISTILL	40.	1.00	0.204	1.50	35.9	2.66	1.13	1.47	12.68	0.	0.	17.95	1.353	-28.	0	67	
33254	DES0A3	DISTILL	40.	1.77	0.224	1.50	58.6	4.34	1.84	1.95	19.95	0.	-4.74	23.34	1.760	-55.	0	63	
33254	DES0A3	RESIDUA	40.	1.00	0.204	1.50	35.9	2.66	1.13	1.47	10.35	0.	0.	15.61	1.177	-21.	0	999	
33254	DES0A3	RESIDUA	40.	1.77	0.224	1.50	58.6	4.34	1.84	1.95	16.27	0.	-4.74	19.67	1.483	-44.	0	77	
33254	GTS0AD	DISTILL	40.	0.43	0.168	1.50	8.6	0.64	0.27	0.48	5.98	5.90	0.	13.27	1.000	-1.	5	13	
33254	GTRA08	DISTILL	40.	0.80	0.267	1.50	15.8	1.17	0.50	0.70	9.15	2.05	0.	13.57	1.023	-5.	1	23	
33254	GTRA12	DISTILL	40.	0.76	0.265	1.50	15.5	1.15	0.49	0.69	8.67	2.46	0.	13.46	1.015	-4.	2	18	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE-	POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS			
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC				ELEC				WORTH	%	PAY			
		MW												15%		BACK			
33254	GTRA16	DISTILL	40.	0.70	0.247	1.50	15.4	1.14	0.49	0.69	8.13	3.13	0.	13.58	1.023	-5.	1	24	
33254	GTR208	DISTILL	40.	0.56	0.201	1.50	11.9	0.88	0.37	0.58	7.13	4.54	0.	13.50	1.018	-3.	0	999	
33254	GTR212	DISTILL	40.	0.60	0.215	1.50	12.8	0.95	0.40	0.60	7.42	4.12	0.	13.50	1.018	-3.	0	27	
33254	GTR216	DISTILL	40.	0.62	0.226	1.50	13.6	1.01	0.43	0.62	7.48	3.94	0.	13.48	1.016	-3.	1	22	
33254	GTRV08	DISTILL	40.	0.94	0.267	1.50	17.1	1.27	0.54	0.75	10.94	0.60	0.	14.10	1.063	-7.	0	199	
33254	GTRW12	DISTILL	40.	0.93	0.291	1.50	17.0	1.26	0.53	0.75	10.46	0.68	0.	13.68	1.031	-6.	0	27	
33254	GTRW16	DISTILL	40.	0.85	0.271	1.50	16.6	1.23	0.52	0.73	9.66	1.59	0.	13.73	1.035	-6.	0	999	
33254	GTR308	DISTILL	40.	0.71	0.182	1.50	13.6	1.01	0.43	0.65	9.29	3.03	0.	14.41	1.086	-6.	0	63	
33254	GTR312	DISTILL	40.	0.71	0.237	1.50	13.6	1.01	0.43	0.64	8.48	2.98	0.	13.54	1.021	-4.	0	28	
33254	GTR316	DISTILL	40.	0.70	0.232	1.50	14.1	1.05	0.44	0.65	8.41	3.11	0.	13.65	1.029	-4.	0	999	
33254	FCPADS	DISTILL	40.	1.00	0.261	1.50	26.2	1.94	0.83	3.95	11.78	0.	0.	18.51	1.395	-26.	0	64	
33254	FCPADS	DISTILL	40.	1.49	0.279	1.50	35.8	2.65	1.13	5.52	15.99	0.	-3.04	22.26	1.678	-42.	0	62	
33254	FCMCDS	DISTILL	40.	1.00	0.349	1.50	27.4	2.03	0.86	3.71	10.38	0.	0.	16.99	1.281	-21.	0	71	
33254	FCMCDS	DISTILL	40.	1.18	0.360	1.50	30.8	2.28	0.97	4.17	11.67	0.	-1.11	17.99	1.356	-26.	0	69	
33314	ONOCGN	COAL-AF	10.	0.	0.	0.86	4.6	0.35	0.15	0.45	0.76	2.96	0.	4.66	1.000	0.	0	0	
33314	STM141	RESIDUA	10.	0.21	0.092	0.86	3.6	0.27	0.12	0.34	1.54	2.33	0.	4.60	0.987	1.	999	0	
33314	STM141	COAL-FG	10.	0.21	0.092	0.86	6.6	0.50	0.21	0.57	0.90	2.33	0.	4.51	0.967	-0.	10	9	
33314	STM141	COAL-AF	10.	0.21	0.092	0.86	5.6	0.42	0.18	0.50	0.90	2.33	0.	4.33	0.929	1.	23	5	
33314	STM088	RESIDUA	10.	0.15	0.065	0.86	3.1	0.23	0.10	0.32	1.47	2.52	0.	4.65	0.997	1.	-4	0	
33314	STM088	COAL-FG	10.	0.15	0.065	0.86	6.0	0.45	0.19	0.54	0.85	2.52	0.	4.57	0.980	-0.	9	9	
33314	STM088	COAL-AF	10.	0.15	0.065	0.86	5.2	0.40	0.17	0.48	0.85	2.52	0.	4.43	0.949	0.	24	4	
33314	PFBSTM	COAL-PF	10.	0.36	0.153	0.86	8.6	0.65	0.28	0.66	1.00	1.89	0.	4.49	0.964	-1.	8	10	
33314	TISTHT	RESIDUA	10.	0.49	0.208	0.86	17.3	1.32	0.56	0.70	1.87	1.52	0.	5.96	1.278	-10.	0	107	
33314	TISTHT	COAL	10.	0.49	0.208	0.86	22.1	1.68	0.71	0.98	1.08	1.52	0.	5.98	1.282	-13.	0	939	
33314	TIHRSG	RESIDUA	10.	0.25	0.080	0.86	15.4	1.14	0.49	0.56	1.72	2.21	0.	6.11	1.311	-10.	0	71	
33314	TIHRSG	COAL	10.	0.25	0.080	0.86	19.9	1.51	0.64	0.82	1.30	2.21	0.	6.18	1.325	-12.	0	121	
33314	STIRL	DISTILL	10.	0.61	0.190	0.86	5.0	0.37	0.16	0.35	2.85	1.14	0.	4.87	1.045	-1.	0	55	
33314	STIRL	RESIDUA	10.	0.61	0.190	0.86	5.0	0.37	0.16	0.35	2.33	1.14	0.	4.35	0.932	1.	61	2	
33314	STIRL	COAL	10.	0.61	0.190	0.86	8.4	0.62	0.26	0.61	1.35	1.14	0.	3.99	0.855	0.	16	6	
33314	HEGT85	COAL-AF	10.	1.00	0.101	0.86	29.6	2.24	0.95	1.34	2.24	0.	0.	6.77	1.452	-19.	0	999	
33314	HEGT85	COAL-AF	10.	3.07	0.127	0.86	56.8	4.31	1.83	2.06	5.31	0.	-3.68	9.83	2.108	-41.	0	129	
33314	HEGT60	COAL-AF	10.	1.00	0.132	0.86	26.1	1.98	0.84	1.11	2.16	0.	0.	6.10	1.308	-15.	0	999	
33314	HEGT60	COAL-AF	10.	1.03	0.133	0.86	26.1	1.98	0.84	1.03	2.20	0.	-0.05	6.00	1.288	-15.	0	999	
33314	HEGT00	COAL-AF	10.	0.42	0.066	0.86	14.3	1.09	0.46	0.64	1.32	1.72	0.	5.23	1.122	-6.	0	999	
33314	FCMCCL	COAL	10.	0.75	0.277	0.86	16.9	1.31	0.56	0.87	1.36	0.75	0.	4.85	1.040	-7.	3	16	
33314	FCSTCL	COAL	10.	1.00	0.385	0.86	19.9	1.55	0.66	1.18	1.53	0.	0.	4.92	1.055	-8.	4	16	
33314	FCSTCL	COAL	10.	1.09	0.394	0.86	20.0	1.55	0.66	1.08	1.60	0.	-0.16	4.74	1.017	-8.	4	14	
33314	ICGTST	COAL	10.	0.75	0.227	0.86	17.0	1.33	0.56	0.86	1.49	0.74	0.	4.98	1.068	-7.	3	18	
33314	GTSGAR	RESIDUA	10.	0.79	0.247	0.86	6.0	0.45	0.19	0.35	2.61	0.61	0.	4.21	0.904	1.	24	4	
33314	GTAC08	RESIDUA	10.	0.61	0.226	0.86	4.6	0.34	0.14	0.30	2.16	1.16	0.	4.10	0.879	2.	999	0	
33314	GTAC12	RESIDUA	10.	0.76	0.278	0.86	5.2	0.38	0.16	0.32	2.39	0.70	0.	3.96	0.850	2.	72	2	
33314	GTAC16	RESIDUA	10.	0.87	0.310	0.86	5.8	0.43	0.18	0.34	2.56	0.40	0.	3.92	0.841	2.	39	3	
33314	GTVC16	RESIDUA	10.	0.90	0.294	0.86	6.3	0.46	0.20	0.36	2.74	0.29	0.	4.05	0.868	1.	27	4	
33314	CC1626	RESIDUA	10.	1.00	0.320	0.86	7.4	0.56	0.24	0.59	2.92	0.	0.	4.31	0.925	-0.	13	7	

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNU	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT	COST	+			ELEC							WORTH	%	PAY	BACK
		MW	REQD	RATIO	*10**6	INSNC										15%			
33314 CC1626 RESIDUA	10.	1.38	0.349	0.86	8.1	0.62	0.26	0.52	3.52	0.	-0.67	4.26	0.914	-0.	12	7			
33314 CC1622 RESIDUA	10.	1.00	0.336	0.86	7.0	0.53	0.23	0.57	2.85	0.	0.	4.18	0.896	0.	17	6			
33314 CC1622 RESIDUA	10.	1.24	0.356	0.86	7.4	0.56	0.24	0.49	3.22	0.	-0.42	4.09	0.877	0.	17	6			
33314 CC1222 RESIDUA	10.	1.00	0.339	0.86	6.7	0.51	0.22	0.55	2.84	0.	0.	4.13	0.885	1.	19	5			
33314 CC1222 RESIDUA	10.	1.23	0.359	0.86	7.0	0.53	0.23	0.49	3.19	0.	-0.41	4.03	0.864	1.	20	5			
33314 CC0822 RESIDUA	10.	0.97	0.354	0.86	6.3	0.48	0.20	0.45	2.69	0.08	0.	3.90	0.837	2.	29	4			
33314 STIG15 RESIDUA	10.	1.00	0.120	0.86	7.9	0.59	0.25	0.65	3.77	0.	0.	5.26	1.128	-3.	0	66			
33314 STIG15 RESIDUA	10.	34.02	0.171	0.86	99.7	7.39	3.14	5.82	85.30	0.	-58.69	42.96	9.213	-165.	0	59			
33314 STIG10 RESIDUA	10.	1.00	0.172	0.86	7.3	0.54	0.23	0.59	3.55	0.	0.	4.92	1.055	-2.	0	181			
33314 STIG10 RESIDUA	10.	3.15	0.218	0.86	12.9	0.96	0.41	0.79	8.37	0.	-3.81	6.71	1.439	-10.	0	61			
33314 STIG1S RESIDUA	10.	1.00	0.196	0.86	7.0	0.52	0.22	0.58	3.45	0.	0.	4.76	1.021	-1.	1	26			
33314 STIG1S RESIDUA	10.	1.85	0.228	0.86	8.8	0.66	0.28	0.58	5.26	0.	-1.50	5.27	1.131	-4.	0	70			
33314 DEADV3 RESIDUA	10.	1.00	0.241	0.86	9.8	0.73	0.31	0.63	3.26	0.	0.	4.92	1.055	-3.	0	999			
33314 DEADV3 RESIDUA	10.	2.09	0.286	0.86	14.8	1.10	0.47	0.68	5.39	0.	-1.94	5.69	1.221	-8.	0	103			
33314 DEHTPM RESIDUA	10.	0.89	0.319	0.86	8.5	0.63	0.27	0.49	2.59	0.33	0.	4.31	0.925	-1.	11	8			
33314 DES0A3 DISTILL	10.	1.00	0.204	0.86	10.6	0.78	0.33	0.66	4.19	0.	0.	5.96	1.278	-7.	0	62			
33314 DES0A3 DISTILL	10.	2.44	0.248	0.86	21.1	1.56	0.66	0.86	7.91	0.	-2.56	8.44	1.809	-19.	0	62			
33314 DES0A3 RESIDUA	10.	1.00	0.204	0.86	10.6	0.78	0.33	0.66	3.42	0.	0.	5.19	1.112	-4.	0	290			
33314 DES0A3 RESIDUA	10.	2.44	0.248	0.86	21.1	1.56	0.66	0.86	6.45	0.	-2.56	6.98	1.497	-15.	0	71			
33314 GTS0AD DISTILL	10.	0.74	0.255	0.86	4.8	0.35	0.15	0.31	2.95	0.78	0.	4.55	0.976	0.	69	2			
33314 GTRA08 DISTILL	10.	1.00	0.320	0.86	7.7	0.57	0.24	0.50	3.58	0.	0.	4.89	1.048	-2.	0	999			
33314 GTRA08 DISTILL	10.	1.23	0.339	0.86	8.1	0.60	0.25	0.42	4.03	0.	-0.41	4.89	1.050	-2.	0	999			
33314 GTRA12 DISTILL	10.	1.00	0.328	0.86	7.6	0.57	0.24	0.49	3.54	0.	0.	4.83	1.037	-2.	0	999			
33314 GTRA12 DISTILL	10.	1.20	0.345	0.86	8.0	0.59	0.25	0.41	3.92	0.	-0.35	4.82	1.034	-2.	0	999			
33314 GTRA16 DISTILL	10.	1.00	0.330	0.86	7.9	0.59	0.25	0.49	3.52	0.	0.	4.84	1.039	-2.	0	999			
33314 GTRA16 DISTILL	10.	1.12	0.341	0.86	8.0	0.59	0.25	0.41	3.74	0.	-0.21	4.80	1.029	-2.	1	25			
33314 GTR208 DISTILL	10.	0.92	0.304	0.86	6.4	0.47	0.20	0.36	3.38	0.23	0.	4.64	0.995	-1.	6	12			
33314 GTR212 DISTILL	10.	0.99	0.325	0.86	6.9	0.51	0.22	0.38	3.51	0.03	0.	4.64	0.996	-1.	6	12			
33314 GTR216 DISTILL	10.	1.00	0.335	0.86	7.2	0.54	0.23	0.43	3.50	0.	0.	4.69	1.007	-1.	4	15			
33314 GTR216 DISTILL	10.	1.01	0.336	0.86	7.2	0.53	0.23	0.39	3.53	0.	-0.03	4.64	0.996	-1.	5	12			
33314 GTRW08 DISTILL	10.	1.00	0.269	0.86	7.9	0.59	0.25	0.53	3.84	0.	0.	5.21	1.117	-3.	0	66			
33314 GTRW08 DISTILL	10.	1.47	0.298	0.86	9.0	0.67	0.28	0.46	4.89	0.	-0.83	5.47	1.174	-5.	0	63			
33314 GTRV12 DISTILL	10.	1.00	0.239	0.86	7.9	0.59	0.25	0.52	3.74	0.	0.	5.10	1.095	-3.	0	73			
33314 GTRV12 DISTILL	10.	1.49	0.320	0.86	9.1	0.67	0.29	0.46	4.79	0.	-0.87	5.34	1.144	-4.	0	67			
33314 GTRV16 DISTILL	10.	1.00	0.293	0.86	8.2	0.60	0.26	0.52	3.72	0.	0.	5.10	1.094	-3.	0	76			
33314 GTRV16 DISTILL	10.	1.38	0.320	0.86	9.0	0.67	0.28	0.45	4.52	0.	-0.67	5.25	1.126	-4.	0	70			
33314 GTR308 DISTILL	10.	1.00	0.249	0.86	7.2	0.53	0.23	0.48	3.95	0.	0.	5.18	1.111	-3.	0	62			
33314 GTR308 DISTILL	10.	1.12	0.258	0.86	7.2	0.53	0.23	0.40	4.23	0.	-0.21	5.18	1.111	-3.	0	61			
33314 GTR312 DISTILL	10.	1.00	0.299	0.86	7.3	0.54	0.23	0.49	3.69	0.	0.	4.95	1.061	-2.	0	88			
33314 GTR312 DISTILL	10.	1.20	0.315	0.86	7.5	0.56	0.24	0.41	4.10	0.	-0.35	4.95	1.062	-2.	0	87			
33314 GTR316 DISTILL	10.	1.00	0.297	0.86	7.6	0.56	0.24	0.49	3.70	0.	0.	4.99	1.071	-2.	0	83			
33314 GTR316 DISTILL	10.	1.18	0.311	0.86	7.8	0.58	0.25	0.41	4.07	0.	-0.32	4.99	1.071	-3.	0	84			
33314 FCPADS DISTILL	10.	1.00	0.227	0.86	8.5	0.63	0.27	1.32	4.06	0.	0.	6.28	1.346	-7.	0	61			
33314 FCPADS DISTILL	10.	2.59	0.279	0.86	16.4	1.21	0.52	2.77	8.00	0.	-2.83	9.66	2.071	-21.	0	60			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	CANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS				
SYSTEM	FUEL	REQD	GEN/	/HEAT COST	RATIO *10**6	INSNC	ELEC										WORTH	%	PAY
		MW	REQD														15%		BACK
33314 FCMCDS DISTILL	10.	1.00	0.304	0.86	8.6	0.64	0.27	1.24	3.66	0.	0.	5.81	1.247	-6.	0	64			
33314 FCMCDS DISTILL	10.	2.05	0.360	0.86	14.0	1.03	0.44	2.09	5.83	0.	-1.87	7.53	1.615	-14.	0	62			
33315 OMOCGN COAL-AF	19.	0.	0.	1.05	5.7	0.44	0.19	0.54	1.14	5.43	0.	7.72	1.000	0.	0	0			
33315 STM141 RESIDUA	19.	0.17	0.079	1.05	4.6	0.35	0.15	0.39	2.31	4.49	0.	7.70	0.997	1.	-3	0			
33315 STM141 COAL-FG	19.	0.17	0.079	1.05	8.6	0.66	0.28	0.68	1.34	4.49	0.	7.45	0.965	-1.	11	8			
33315 STM141 COAL-AF	19.	0.17	0.079	1.05	7.1	0.54	0.23	0.60	1.34	4.49	0.	7.20	0.933	1.	26	4			
33315 STM088 RESIDUA	19.	0.12	0.055	1.05	4.0	0.30	0.13	0.38	2.20	4.77	0.	7.78	1.008	1.	-7	0			
33315 STM088 COAL-FG	19.	0.12	0.055	1.05	7.9	0.60	0.26	0.65	1.28	4.77	0.	7.56	0.979	-1.	10	9			
33315 STM088 COAL-AF	19.	0.12	0.055	1.05	6.7	0.51	0.21	0.58	1.28	4.77	0.	7.36	0.952	1.	27	4			
33315 PFBSTM COAL-PF	19.	0.29	0.131	1.05	11.1	0.84	0.36	0.83	1.50	3.84	0.	7.37	0.954	-1.	9	9			
33315 TISTMT RESIDUA	19.	0.40	0.179	1.05	23.3	1.77	0.75	0.88	2.80	3.27	0.	9.47	1.226	-14.	0	114			
33315 TISTMT COAL	19.	0.40	0.179	1.05	29.7	2.25	0.96	1.24	1.62	3.27	0.	9.35	1.211	-17.	0	999			
33315 TIHRSG RESIDUA	19.	0.21	0.069	1.05	20.8	1.54	0.65	0.72	2.58	4.30	0.	9.79	1.268	-13.	0	70			
33315 TIHRSG COAL	19.	0.21	0.069	1.05	26.8	2.03	0.86	1.05	1.50	4.30	0.	9.75	1.262	-16.	0	137			
33315 STIRL DISTILL	19.	0.50	0.164	1.05	7.2	0.54	0.23	0.45	4.27	2.70	0.	8.19	1.060	-2.	0	58			
33315 STIRL RESIDUA	19.	0.50	0.164	1.05	7.3	0.54	0.23	0.45	3.49	2.70	0.	7.40	0.959	0.	19	5			
33315 STIRL COAL	19.	0.50	0.164	1.05	13.1	0.97	0.41	0.80	2.02	2.70	0.	6.91	0.894	-1.	12	7			
33315 HEGT05 COAL-AF	19.	1.00	0.104	1.05	44.1	3.35	1.42	1.87	3.86	0.	0.	10.50	1.360	-27.	0	999			
33315 HEGT85 COAL-AF	19.	2.58	0.125	1.05	77.1	5.85	2.49	2.78	8.17	0.	-5.15	14.14	1.831	-54.	0	309			
33315 HEGT60 COAL-AF	19.	0.85	0.117	1.05	34.9	2.65	1.13	1.35	3.32	0.83	0.	9.28	1.201	-19.	0	999			
33315 HEGT00 COAL-AF	19.	0.34	0.057	1.05	19.1	1.45	0.62	0.83	1.98	3.57	0.	8.44	1.093	-9.	0	999			
33315 FCMCCL COAL	19.	0.61	0.240	1.05	22.4	1.74	0.74	1.14	2.04	2.11	0.	7.78	1.008	-8.	5	14			
33315 FCSTCL COAL	19.	0.89	0.362	1.05	26.6	2.07	0.88	1.41	2.40	0.60	0.	7.36	0.953	-9.	6	12			
33315 IGGTST COAL	19.	0.61	0.135	1.05	22.2	1.73	0.73	1.04	2.24	2.11	0.	7.85	1.016	-9.	4	14			
33315 GTSCAR RESIDUA	19.	0.65	0.214	1.05	8.0	0.59	0.25	0.43	3.92	1.90	0.	7.10	0.919	1.	22	5			
33315 GTAC08 RESIDUA	19.	0.50	0.196	1.05	6.1	0.45	0.19	0.37	3.23	2.72	0.	6.97	0.902	2.	149	1			
33315 GTAC12 RESIDUA	19.	0.62	0.241	1.05	7.0	0.52	0.22	0.40	3.58	2.04	0.	6.76	0.875	3.	50	2			
33315 GTAC16 RESIDUA	19.	0.71	0.268	1.05	7.9	0.58	0.25	0.43	3.85	1.57	0.	6.68	0.865	2.	33	3			
33315 GTVC16 RESIDUA	19.	0.74	0.255	1.05	8.3	0.62	0.26	0.44	4.11	1.41	0.	6.84	0.886	2.	26	4			
33315 CC1626 RESIDUA	19.	1.00	0.333	1.05	10.6	0.81	0.34	0.71	4.91	0.	0.	6.78	0.877	1.	17	6			
33315 CC1626 RESIDUA	19.	1.12	0.343	1.05	10.8	0.82	0.35	0.63	5.28	0.	-0.40	6.68	0.865	1.	17	6			
33315 CC1622 RESIDUA	19.	1.00	0.355	1.05	10.1	0.76	0.32	0.64	4.79	0.	0.	6.52	0.844	2.	21	5			
33315 CC1622 RESIDUA	19.	1.01	0.356	1.05	10.0	0.76	0.32	0.60	4.81	0.	-0.03	6.46	0.837	2.	22	5			
33315 CC1222 RESIDUA	19.	1.00	0.359	1.05	9.6	0.72	0.31	0.62	4.76	0.	0.	6.42	0.831	2.	24	4			
33315 CC1222 RESIDUA	19.	1.00	0.359	1.05	9.5	0.72	0.31	0.59	4.77	0.	-0.01	6.38	0.826	2.	25	4			
33315 CC0822 RESIDUA	19.	0.79	0.305	1.05	8.3	0.63	0.27	0.54	4.03	1.12	0.	6.59	0.854	2.	29	4			
33315 STIG15 RESIDUA	19.	1.00	0.127	1.05	11.6	0.86	0.37	0.88	6.48	0.	0.	8.58	1.112	-5.	0	72			
33315 STIG15 RESIDUA	19.	27.86	0.171	1.05	145.9	10.81	4.60	8.40	127.94	0.	-87.44	64.31	8.327	-243.	0	59			
33315 STIG10 RESIDUA	19.	1.00	0.182	1.05	10.7	0.79	0.34	0.79	6.07	0.	0.	7.99	1.034	-3.	0	999			
33315 STIG10 RESIDUA	19.	2.58	0.218	1.05	17.4	1.29	0.55	1.03	12.55	0.	-5.13	10.29	1.332	-13.	0	62			
33315 STIG15 RESIDUA	19.	1.00	0.208	1.05	10.1	0.75	0.32	0.76	5.88	0.	0.	7.71	0.998	-2.	5	13			
33315 STIG15 RESIDUA	19.	1.51	0.228	1.05	11.9	0.88	0.37	0.75	7.89	0.	-1.67	8.23	1.065	-4.	0	999			
33315 DEADV3 RESIDUA	19.	1.00	0.254	1.05	14.7	1.09	0.46	0.82	5.54	0.	0.	7.91	1.024	-5.	3	17			
33315 DEADV3 RESIDUA	19.	1.72	0.286	1.05	22.0	1.63	0.69	0.91	8.11	0.	-2.35	9.00	1.166	-12.	0	999			

ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST										PERCENT OF ORIGINAL COST 100									
*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****																			
ENERGY CONV	SITE- POWER	POWER FESRPOWER	CAPITAL CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS						
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC	ELEC				WORTH	%	PAY						
		MW									15%		BACK						
33315 DEHTPM RESIDUA	19.	0.73	0.275	1.05	11.1	0.82	0.35	0.60	3.88	1.49	0.	7.15	0.925	-1.	12	7			
33315 DESOA3 DISTILL	19.	1.00	0.215	1.05	17.9	1.32	0.56	0.91	7.15	0.	0.	9.94	1.287	-13.	0	65			
33315 DESOA3 DISTILL	19.	2.01	0.248	1.05	31.3	2.32	0.99	1.17	11.92	0.	-3.28	13.12	1.699	-29.	0	62			
33315 DESOA3 RESIDUA	19.	1.00	0.215	1.05	17.9	1.32	0.56	0.91	5.83	0.	0.	8.62	1.117	-8.	0	999			
33315 DESOA3 RESIDUA	19.	2.01	0.248	1.05	31.3	2.32	0.99	1.17	9.73	0.	-3.28	10.93	1.415	-22.	0	76			
33315 GTSOAD DISTILL	19.	0.60	0.221	1.05	6.4	0.47	0.20	0.38	4.43	2.16	0.	7.64	0.989	0.	17	6			
33315 GTRA08 DISTILL	19.	1.00	0.337	1.05	10.8	0.80	0.34	0.57	6.03	0.	0.	7.74	1.002	-2.	5	14			
33315 GTRA08 DISTILL	19.	1.01	0.338	1.05	10.8	0.80	0.34	0.52	6.06	0.	-0.03	7.69	0.996	-2.	5	12			
33315 GTRA12 DISTILL	19.	0.98	0.340	1.05	10.7	0.79	0.34	0.52	5.89	0.09	0.	7.63	0.988	-2.	6	11			
33315 GTRA16 DISTILL	19.	0.92	0.320	1.05	10.8	0.80	0.34	0.52	5.63	0.46	0.	7.74	1.002	-2.	5	14			
33315 GTR208 DISTILL	19.	0.76	0.264	1.05	8.5	0.63	0.27	0.45	5.07	1.32	0.	7.74	1.002	-1.	4	14			
33315 GTR212 DISTILL	19.	0.81	0.282	1.05	9.2	0.68	0.29	0.47	5.27	1.02	0.	7.73	1.001	-2.	5	13			
33315 GTR216 DISTILL	19.	0.83	0.294	1.05	9.6	0.71	0.30	0.43	5.29	0.91	0.	7.71	0.998	-2.	5	13			
33315 GTRW08 DISTILL	19.	1.00	0.284	1.05	11.4	0.84	0.36	0.65	6.52	0.	0.	8.37	1.083	-5.	0	81			
33315 GTRW08 DISTILL	19.	1.20	0.297	1.05	12.0	0.89	0.38	0.57	7.35	0.	-0.66	8.52	1.103	-5.	0	71			
33315 GTRW12 DISTILL	19.	1.00	0.305	1.05	11.4	0.84	0.36	0.65	6.33	0.	0.	8.18	1.059	-4.	0	***			
33315 GTRW12 DISTILL	19.	1.22	0.320	1.05	12.0	0.89	0.38	0.57	7.19	0.	-0.72	8.31	1.076	-5.	0	107			
33315 GTRW16 DISTILL	19.	1.00	0.310	1.05	11.6	0.86	0.37	0.64	6.28	0.	0.	8.15	1.056	-4.	0	999			
33315 GTRW16 DISTILL	19.	1.13	0.319	1.05	11.9	0.88	0.38	0.56	6.78	0.	-0.42	8.18	1.060	-4.	0	999			
33315 GTR308 DISTILL	19.	0.92	0.242	1.05	9.6	0.71	0.30	0.50	6.36	0.44	0.	8.31	1.076	-4.	0	65			
33315 GTR312 DISTILL	19.	0.93	0.310	1.05	10.0	0.74	0.31	0.50	6.15	0.10	0.	7.82	1.012	-2.	3	17			
33315 GTR316 DISTILL	19.	0.97	0.303	1.05	10.4	0.77	0.33	0.51	6.11	0.19	0.	7.90	1.023	-3.	1	25			
33315 FCPADS DISTILL	19.	1.00	0.240	1.05	13.7	1.01	0.43	2.20	6.91	0.	0.	10.55	1.367	-13.	0	62			
33315 FCPADS DISTILL	19.	2.12	0.279	1.05	24.0	1.78	0.76	4.09	11.99	0.	-3.66	14.95	1.936	-32.	0	61			
33315 FCHCDS DISTILL	19.	1.00	0.321	1.05	14.2	1.05	0.45	2.07	6.18	0.	0.	9.75	1.262	-10.	0	66			
33315 FCHCDS DISTILL	19.	1.68	0.360	1.05	20.7	1.53	0.65	3.09	8.75	0.	-2.22	11.81	1.529	-20.	0	64			
33316 OMOCN COAL-AF	16.	0.	0.	0.91	5.7	0.44	0.19	0.54	1.14	4.69	0.	6.99	1.000	0.	0	0			
33316 STM141 RESIDUA	16.	0.20	0.088	0.91	4.6	0.35	0.15	0.39	2.31	3.76	0.	6.96	0.996	1.	-3	0			
33316 STM141 COAL-FG	16.	0.20	0.088	0.91	8.6	0.66	0.28	0.68	1.34	3.76	0.	6.72	0.961	-1.	11	8			
33316 STM141 COAL-AF	16.	0.20	0.088	0.91	7.1	0.54	0.23	0.60	1.34	3.76	0.	6.47	0.926	1.	26	4			
33316 STM088 RESIDUA	16.	0.14	0.061	0.91	4.0	0.30	0.13	0.38	2.20	4.04	0.	7.05	1.009	1.	-7	0			
33316 STM088 COAL-FG	16.	0.14	0.061	0.91	7.9	0.60	0.26	0.65	1.28	4.04	0.	6.83	0.977	-1.	10	9			
33316 STM088 COAL-AF	16.	0.14	0.061	0.91	6.7	0.51	0.21	0.58	1.28	4.04	0.	6.62	0.947	1.	27	4			
33316 PFBSTM COAL-PF	16.	0.34	0.146	0.91	11.1	0.84	0.36	0.83	1.50	3.10	0.	6.64	0.950	-1.	9	9			
33316 TISTMT RESIDUA	16.	0.46	0.199	0.91	23.3	1.77	0.75	0.88	2.80	2.54	0.	8.74	1.250	-14.	0	114			
33316 TISTMT COAL	16.	0.46	0.199	0.91	29.7	2.25	0.96	1.24	1.62	2.54	0.	8.62	1.233	-17.	0	999			
33316 TIHRSG RESIDUA	16.	0.24	0.077	0.91	20.8	1.54	0.65	0.72	2.58	3.57	0.	9.06	1.296	-13.	0	70			
33316 TIHRSG COAL	16.	0.24	0.077	0.91	26.8	2.03	0.86	1.05	1.50	3.57	0.	9.02	1.296	-16.	0	137			
33316 STIRL DISTILL	16.	0.58	0.182	0.91	7.2	0.54	0.23	0.45	4.27	1.97	0.	7.46	1.067	-2.	0	58			
33316 STIRL RESIDUA	16.	0.58	0.182	0.91	7.3	0.54	0.23	0.45	3.49	1.97	0.	6.67	0.954	0.	19	5			
33316 STIRL COAL	16.	0.58	0.182	0.91	13.1	0.97	0.41	0.80	2.02	1.97	0.	6.17	0.883	-1.	12	7			
33316 HEGT85 COAL-AF	16.	1.00	0.100	0.91	40.5	3.08	1.31	1.75	3.49	0.	0.	9.63	1.377	-25.	0	999			
33316 HEGT85 COAL-AF	16.	2.98	0.125	0.91	77.1	5.85	2.49	2.78	8.17	0.	-5.59	13.70	1.960	-55.	0	175			
33316 HEGT60 COAL-AF	16.	0.98	0.130	0.91	34.9	2.65	1.13	1.35	3.32	0.10	0.	8.54	1.222	-19.	0	999			

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)*****

ENERGY CONV	SITE- POWER	POWER FESRPOWER CAPITAL CAPITAL TAXES GAHDM FUEL PURCHD REVNU TOTAL NORML PRESNT ROI GROSS																
SYSTEM	FUEL	REQD	GEN/	/HEAT COST														
		MW	REQD	RATIO *10**6		INSNC									WORTH	%	PAY	
															15%		BACK	
33316	HEGT00	COAL-AF	16.	0.40	0.063	0.91	19.1	1.45	0.62	0.83	1.98	2.83	0.	7.70	1.102	-9.	0	999
33316	FCMCCL	COAL	16.	0.71	0.266	0.91	22.4	1.74	0.74	1.14	2.04	1.38	0.	7.05	1.009	-8.	5	14
33316	FCSTCL	COAL	16.	1.00	0.391	0.91	26.7	2.08	0.88	1.50	2.36	0.	0.	6.83	0.977	-10.	5	13
33316	FCSTCL	COAL	16.	1.03	0.394	0.91	26.6	2.07	0.88	1.41	2.40	0.	-0.06	6.68	0.955	-9.	6	12
33316	IGGTST	COAL	16.	0.71	0.217	0.91	22.2	1.73	0.73	1.04	2.24	1.37	0.	7.12	1.018	-9.	4	14
33316	GTSDAR	RESIDUA	16.	0.75	0.238	0.91	8.0	0.59	0.25	0.43	3.92	1.17	0.	6.37	0.911	1.	22	5
33316	GTAC08	RESIDUA	16.	0.58	0.217	0.91	6.1	0.45	0.19	0.37	3.23	1.99	0.	6.24	0.892	2.	149	1
33316	GTAC12	RESIDUA	16.	0.72	0.268	0.91	7.0	0.52	0.22	0.40	3.58	1.30	0.	6.02	0.862	3.	50	2
33316	GTAC16	RESIDUA	16.	0.82	0.298	0.91	7.9	0.58	0.25	0.43	3.85	0.84	0.	5.95	0.851	2.	33	3
33316	GTVC16	RESIDUA	16.	0.83	0.283	0.91	8.3	0.62	0.26	0.44	4.11	0.68	0.	6.11	0.874	2.	26	4
33316	CC1626	RESIDUA	16.	1.00	0.325	0.91	10.0	0.76	0.32	0.71	4.51	0.	0.	6.31	0.903	0.	15	7
33316	CC1626	RESIDUA	16.	1.30	0.348	0.91	10.8	0.82	0.35	0.63	5.28	0.	-0.84	6.24	0.893	-0.	14	7
33316	CC1622	RESIDUA	16.	1.00	0.341	0.91	9.7	0.73	0.31	0.68	4.41	0.	0.	6.13	0.877	1.	18	6
33316	CC1622	RESIDUA	16.	1.17	0.356	0.91	10.0	0.76	0.32	0.60	4.81	0.	-0.47	6.02	0.862	1.	19	5
33316	CC1222	RESIDUA	16.	1.00	0.344	0.91	9.2	0.70	0.30	0.67	4.38	0.	0.	6.06	0.867	1.	20	5
33316	CC1222	RESIDUA	16.	1.16	0.359	0.91	9.5	0.72	0.31	0.59	4.77	0.	-0.45	5.94	0.850	2.	21	5
33316	CC0622	RESIDUA	16.	0.92	0.339	0.91	8.3	0.63	0.27	0.54	4.03	0.38	0.	5.86	0.838	2.	29	4
33316	STIG15	RESIDUA	16.	1.00	0.122	0.91	10.8	0.80	0.34	0.82	5.87	0.	0.	7.83	1.120	-5.	0	68
33316	STIG15	RESIDUA	16.	32.21	0.171	0.91	145.9	10.81	4.60	8.40	127.94	0.	-87.88	63.87	9.137	-244.	0	59
33316	STIG10	RESIDUA	16.	1.00	0.175	0.91	10.0	0.74	0.31	0.75	5.51	0.	0.	7.31	1.046	-3.	0	999
33316	STIG10	RESIDUA	16.	2.99	0.218	0.91	17.4	1.29	0.55	1.03	12.55	0.	-5.57	9.85	1.409	-14.	0	61
33316	STIG1S	RESIDUA	16.	1.00	0.200	0.91	9.5	0.70	0.30	0.72	5.35	0.	0.	7.08	1.013	-2.	3	19
33316	STIG1S	RESIDUA	16.	1.75	0.223	0.91	11.9	0.80	0.37	0.75	7.89	0.	-2.11	7.79	1.114	-5.	0	75
33316	DEADV3	RESIDUA	16.	1.00	0.244	0.91	13.3	0.98	0.42	0.78	5.05	0.	0.	7.23	1.034	-4.	2	21
33316	DEADV3	RESIDUA	16.	1.99	0.266	0.91	22.0	1.63	0.69	0.91	8.11	0.	-2.79	8.56	1.225	-12.	0	116
33316	DEHTFM	RESIDUA	16.	0.84	0.305	0.91	11.1	0.82	0.35	0.60	3.88	0.76	0.	6.41	0.917	-1.	12	7
33316	DESOA3	DISTILL	16.	1.00	0.206	0.91	16.0	1.18	0.50	0.85	6.50	0.	0.	9.04	1.294	-11.	0	63
33316	DESOA3	DISTILL	16.	2.32	0.248	0.91	31.3	2.32	0.99	1.17	11.92	0.	-3.72	12.68	1.815	-30.	0	62
33316	DESOA3	RESIDUA	16.	1.00	0.206	0.91	16.0	1.18	0.50	0.65	5.31	0.	0.	7.84	1.122	-7.	0	***
33316	DESOA3	RESIDUA	16.	2.32	0.248	0.91	31.3	2.32	0.99	1.17	9.73	0.	-3.72	10.49	1.501	-23.	0	72
33316	GTSOAD	DISTILL	16.	0.70	0.245	0.91	6.4	0.47	0.20	0.38	4.43	1.42	0.	6.91	0.988	0.	17	6
33316	GTRA06	DISTILL	16.	1.00	0.324	0.91	10.4	0.77	0.33	0.61	5.54	0.	0.	7.25	1.037	-3.	0	999
33316	GTRA03	DISTILL	16.	1.17	0.338	0.91	10.8	0.80	0.34	0.52	6.06	0.	-0.47	7.25	1.038	-3.	0	999
33316	GTRA12	DISTILL	16.	1.00	0.333	0.91	10.4	0.77	0.33	0.60	5.47	0.	0.	7.17	1.026	-3.	1	25
33316	GTRA12	DISTILL	16.	1.14	0.345	0.91	10.7	0.79	0.34	0.52	5.89	0.	-0.38	7.15	1.023	-3.	1	22
33316	GTRA16	DISTILL	16.	1.00	0.335	0.91	10.8	0.80	0.34	0.59	5.45	0.	0.	7.17	1.026	-3.	1	24
33316	GTRA16	DISTILL	16.	1.06	0.341	0.91	10.8	0.80	0.34	0.52	5.63	0.	-0.16	7.12	1.018	-3.	2	19
33316	GTR208	DISTILL	16.	0.87	0.293	0.91	8.5	0.63	0.27	0.45	5.07	0.59	0.	7.00	1.002	-1.	4	14
33316	GTR212	DISTILL	16.	0.94	0.313	0.91	9.2	0.68	0.29	0.47	5.27	0.29	0.	7.00	1.002	-2.	5	13
33316	GTR216	DISTILL	16.	0.96	0.327	0.91	9.6	0.71	0.30	0.48	5.29	0.18	0.	6.97	0.998	-2.	5	13
33316	GTRV08	DISTILL	16.	1.00	0.273	0.91	10.7	0.79	0.34	0.64	5.96	0.	0.	7.73	1.106	-5.	0	68
33316	GTRV08	DISTILL	16.	1.39	0.297	0.91	12.0	0.89	0.38	0.57	7.35	0.	-1.10	8.08	1.156	-6.	0	64
33316	GTRV12	DISTILL	16.	1.00	0.293	0.91	10.7	0.79	0.34	0.64	5.80	0.	0.	7.57	1.083	-4.	0	79
33316	GTRV12	DISTILL	16.	1.41	0.320	0.91	12.0	0.89	0.38	0.57	7.19	0.	-1.16	7.87	1.126	-6.	0	68

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ECONOMIC SENSITIVITY REPORT FOR SELECTED PROCESS-ECS MATCHES

SENSITIVITY OF CAPITAL COST

PERCENT OF ORIGINAL COST 100

*****[LEVELIZED ANNUAL ENERGY COSTS(\$ MILLIONS)]*****

ENERGY CONV	SITE-	POWER	POWER	FESRPOWER	CAPITAL	CAPITAL	TAXES	GANDM	FUEL	PURCHD	REVNUE	TOTAL	NORML	PRESNT	ROI	GROSS
SYSTEM	FUEL	REQD	GEN/ REQD	/HEAT COST	RATIO *10**6	INSNC				ELEC				WORTH	%	PAY
		MW												15%		BACK
33316 GTRW16 DISTILL	16.	1.00	0.298	0.91	11.0	0.81	0.35	0.64	5.76	0.	0.	7.56	1.081	-4.	0	86
33316 GTRW16 DISTILL	16.	1.31	0.319	0.91	11.9	0.88	0.38	0.56	6.78	0.	-0.86	7.74	1.108	-5.	0	74
33316 GTR308 DISTILL	16.	1.00	0.253	0.91	9.7	0.71	0.30	0.57	6.12	0.	0.	7.72	1.104	-4.	0	63
33316 GTR308 DISTILL	16.	1.06	0.257	0.91	9.6	0.71	0.30	0.50	6.36	0.	-0.17	7.69	1.101	-4.	0	62
33316 GTR312 DISTILL	16.	1.00	0.304	0.91	9.8	0.73	0.31	0.59	5.71	0.	0.	7.34	1.050	-3.	0	184
33316 GTR312 DISTILL	16.	1.13	0.314	0.91	10.0	0.74	0.31	0.50	6.15	0.	-0.38	7.33	1.049	-3.	0	190
33316 GTR316 DISTILL	16.	1.00	0.302	0.91	10.2	0.76	0.32	0.60	5.72	0.	0.	7.40	1.059	-3.	0	121
33316 GTR316 DISTILL	16.	1.12	0.311	0.91	10.4	0.77	0.33	0.51	6.11	0.	-0.33	7.39	1.057	-3.	0	129
33316 FCPADS DISTILL	16.	1.00	0.231	0.91	12.4	0.92	0.39	1.95	6.30	0.	0.	9.57	1.369	-11.	0	61
33316 FCPADS DISTILL	16.	2.46	0.279	0.91	24.0	1.78	0.76	4.09	11.99	0.	-4.10	14.51	2.077	-33.	0	60
33316 FCMCDS DISTILL	16.	1.00	0.309	0.91	12.9	0.95	0.41	1.85	5.67	0.	0.	8.87	1.269	-9.	0	64
33316 FCMCDS DISTILL	16.	1.94	0.360	0.91	20.7	1.53	0.65	3.09	8.75	0.	-2.66	11.37	1.626	-21.	0	63

LAEC SENSITIVITY CURVES



GENERAL ELECTRIC COMPANY

DATE 04/09/79

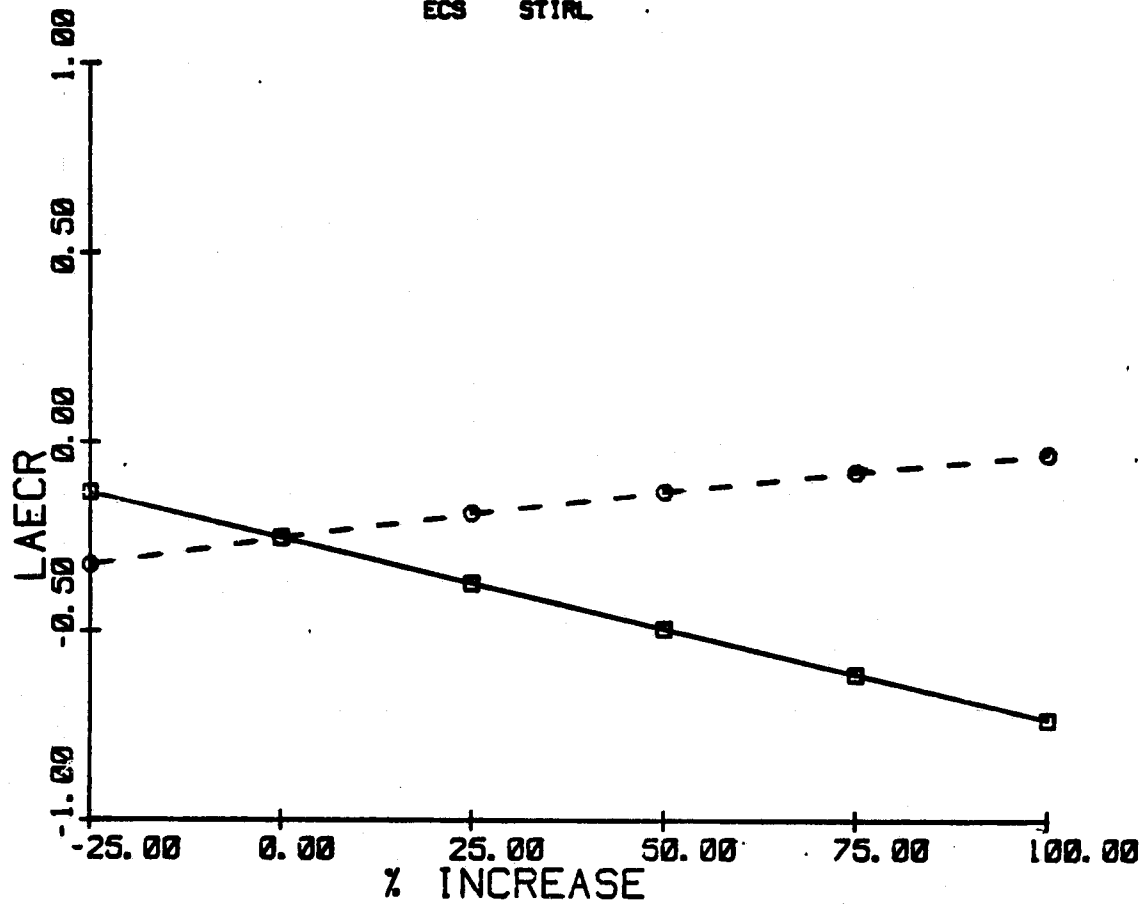
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28111

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 2

PROCESS HEAT- 24

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.276

CAPITAL COST- 1.0

LAEC - 0.720

FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 2.7

LAEC - 0.912

ROI - 0

MW(GEN) - 2

FUEL - RESIDUAL

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/79

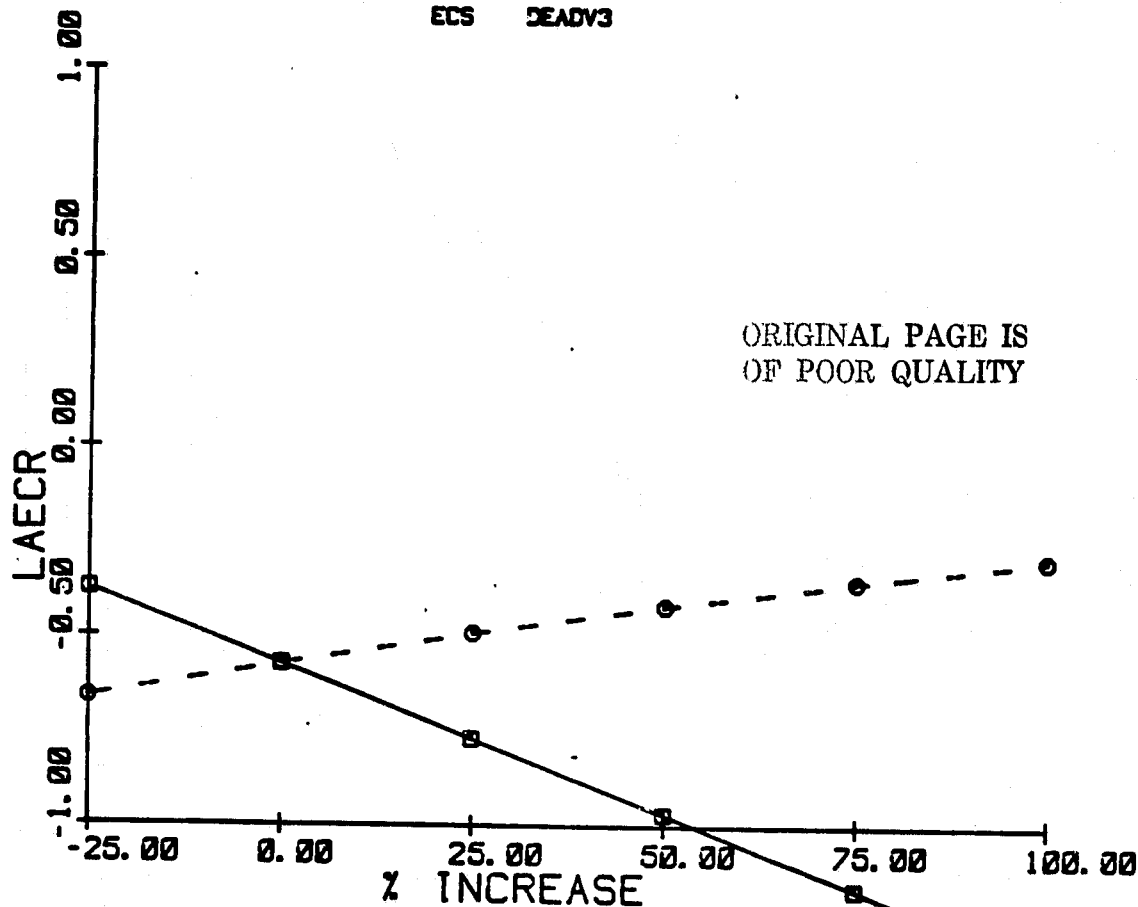
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20111

ECS DEAD3



ORIGINAL PAGE IS
OF POOR QUALITY

PROCESS		BASE CASE		COGENERATION	
MW- 2		NO COGENERATION			
PROCESS HEAT- 24		CAPITAL COST- 1.6		CAPITAL COST- 4.4	
(BTU*10**6)		LAEC - 0.720		LAEC - 1.144	
WASTE FUEL- 0		FUEL - RESIDUAL		ROI - 0	
(BTU*10**6)				MW(GEN) - 2	
POWER/HEAT- 0.276				FUEL - RESIDUAL	
CAPITAL COST					
ELECTRIC POWER					
NO-CGN FUEL					
ECS FUEL					

GENERAL ELECTRIC COMPANY

DATE 04/09/79

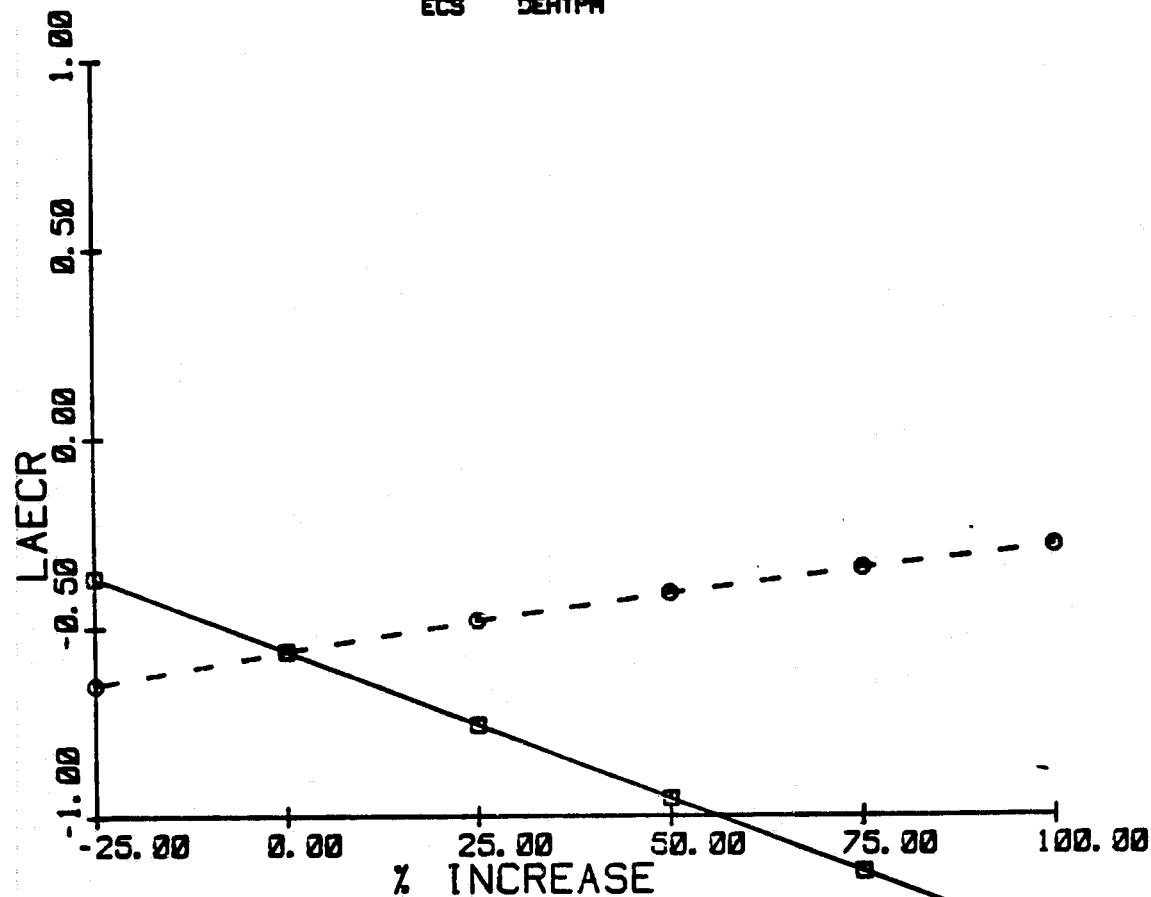
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20111

ECS DEHPM



PROCESS	BASE CASE NO COGENERATION	COGENERATION
MW- 2		CAPITAL COST-4.3
PROCESS HEAT-24	CAPITAL COST-1.8	LAEC -1.138
(BTU*10**6)	LAEC -0.728	ROI -8
WASTE FUEL- 8	FUEL -RESIDUAL	MW(GEN) -2
(BTU*10**6)		FUEL -RESIDUAL
POWER/HEAT- 2.278		
<div> <div>—■—</div> <div>—○—</div> </div> CAPITAL COST ELECTRIC POWER NO-CGN FUEL ECS FUEL		

GENERAL ELECTRIC COMPANY

DATE 04/09/79

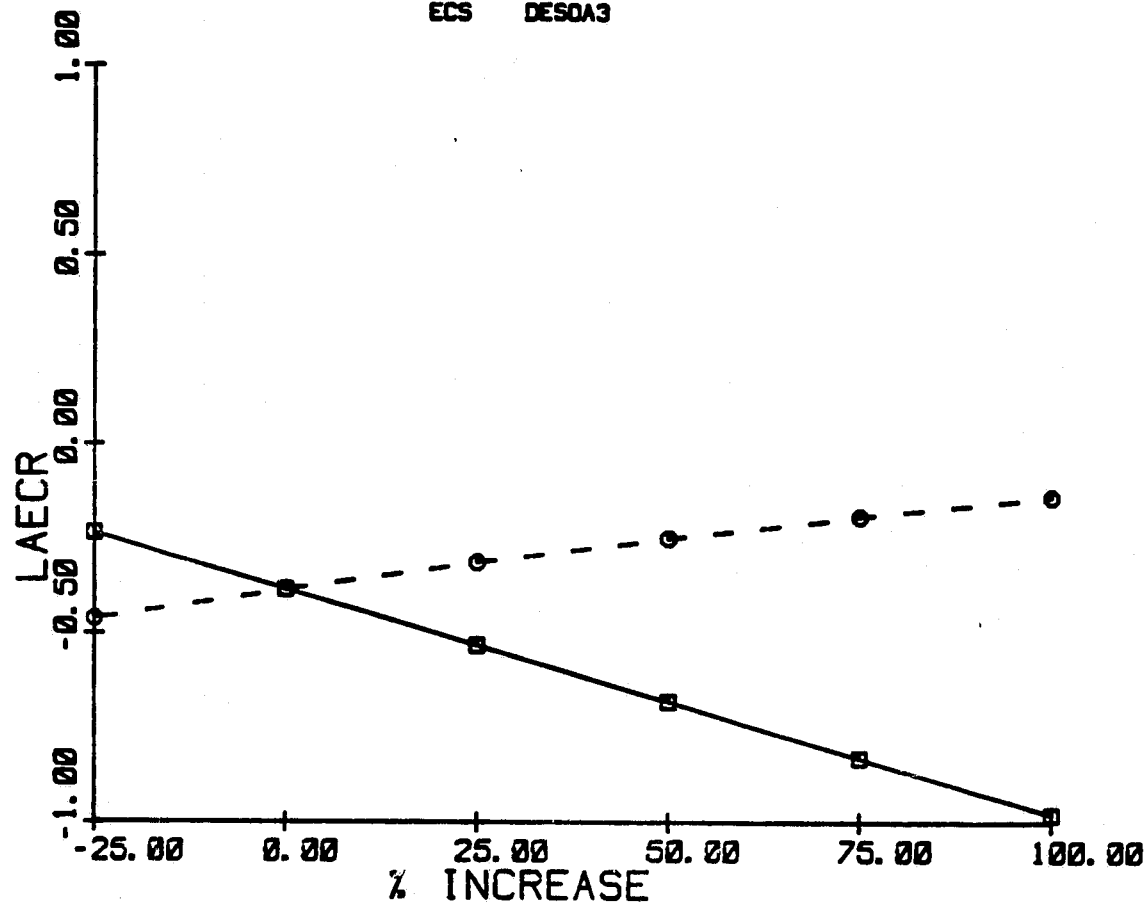
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20111

ECS DESQA3



BASE CASE

NO COGENERATION

PROCESS

MW- 2

PROCESS HEAT- 24

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.276

CAPITAL COST- 1.0

LAEC -0.728

FUEL -RESIDUAL

COGENERATION

CAPITAL COST- 3.3

LAEC -1.007

ROI -0

MW(GEN) -2

FUEL -RESIDUAL

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/79

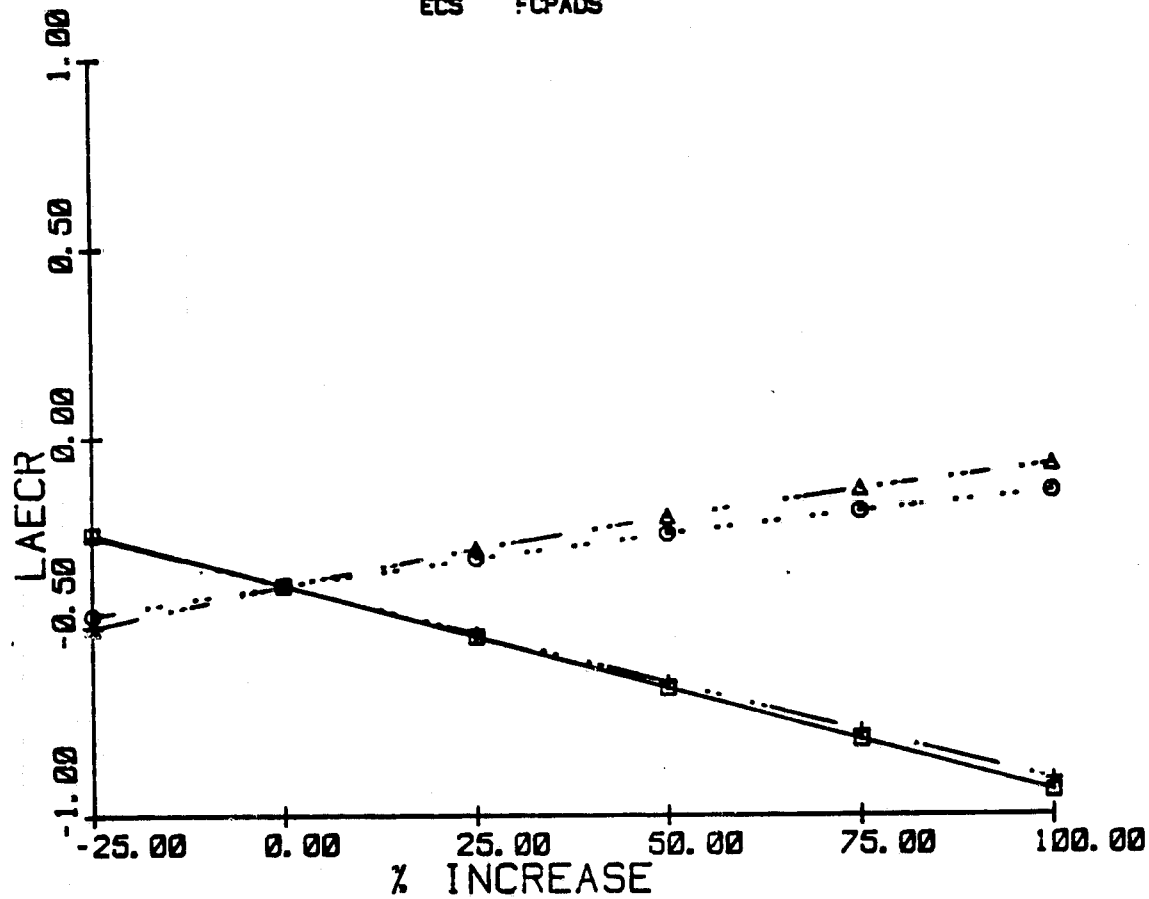
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20111

ECS FCPADS



BASE CASE

NO COGENERATION

PROCESS
MW- 2
PROCESS HEAT- 24
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.276

CAPITAL COST- 1.0
LAEC -0.728
FUEL -RESIDUAL

COGENERATION

CAPITAL COST- 3.0
LAEC -1.012
ROI -0
MW(GEN) -2
FUEL -DISTILLA

—■— CAPITAL COST
- - - - - ELECTRIC POWER
- . - . - NO-CGN FUEL
+ - - - + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/00/70

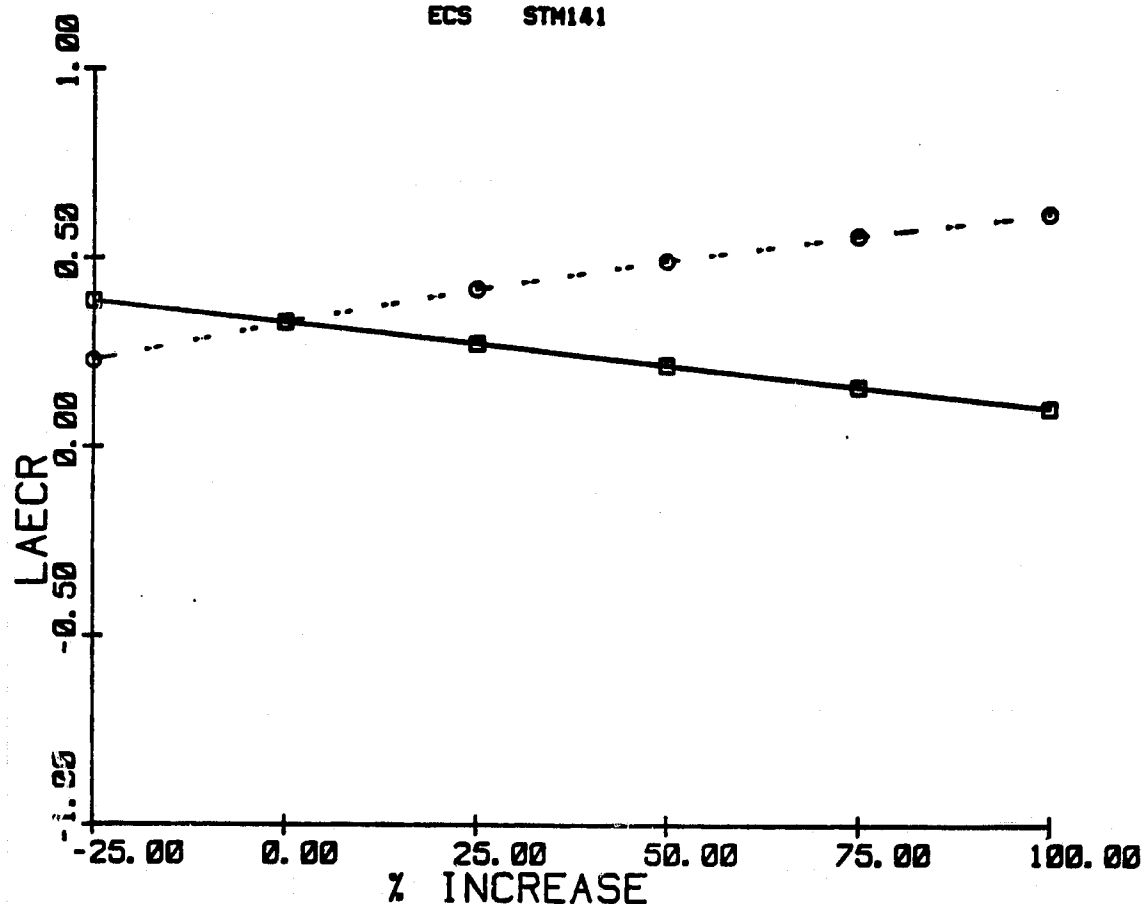
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20401

ECS STM141



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 20

PROCESS HEAT- 650

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.148

CAPITAL COST- 42.0

LAEC - 24.838

FUEL - COAL-FGD

CAPITAL COST- 41.0

LAEC - 10.043

ROI - 0

MW(GEN) - 50

FUEL - COAL-AFB

CAPITAL COST
 ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/00/79

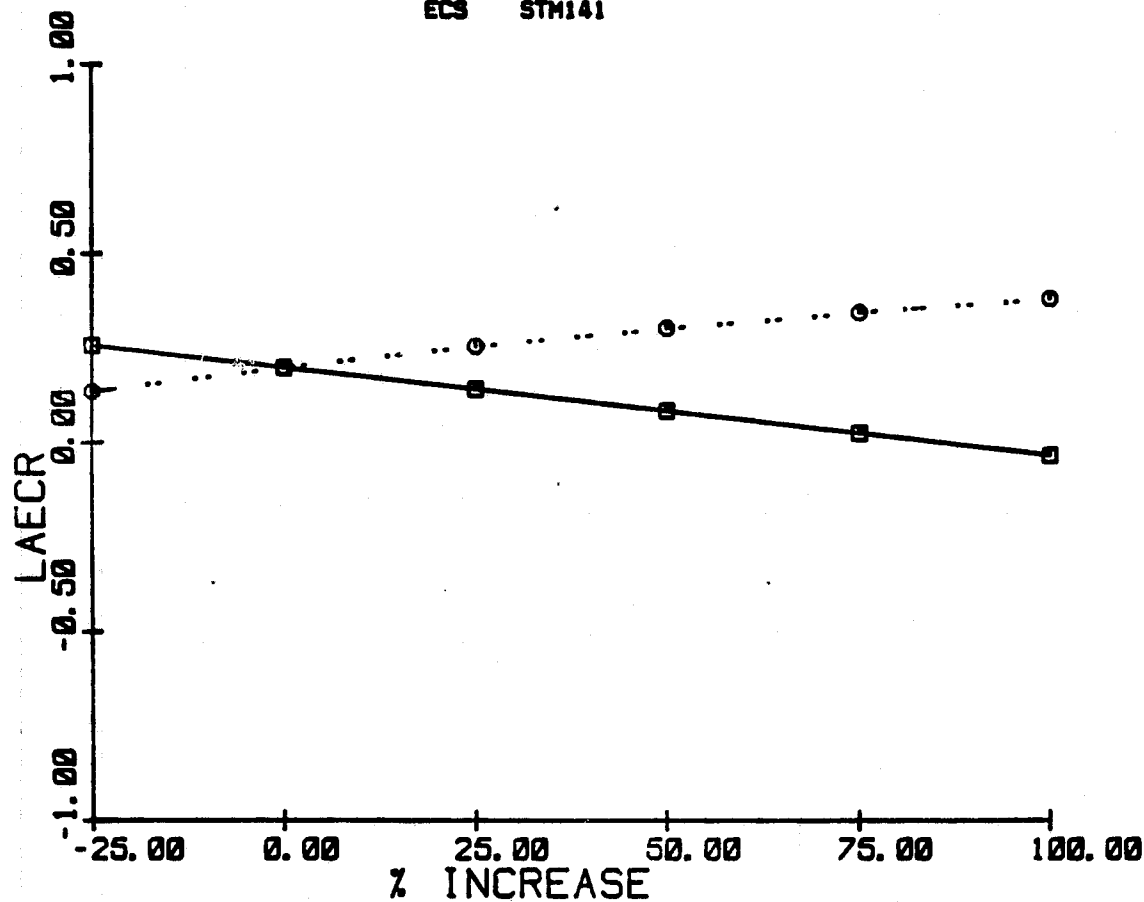
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20401

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 29

PROCESS HEAT- 650

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.140

CAPITAL COST- 42.0

LAEC - 24.830

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 43.4

LAEC - 19.920

ROI - 0

MW(GEN) - 29

FUEL - COAL-AFB

- CAPITAL COST
- - - - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/79

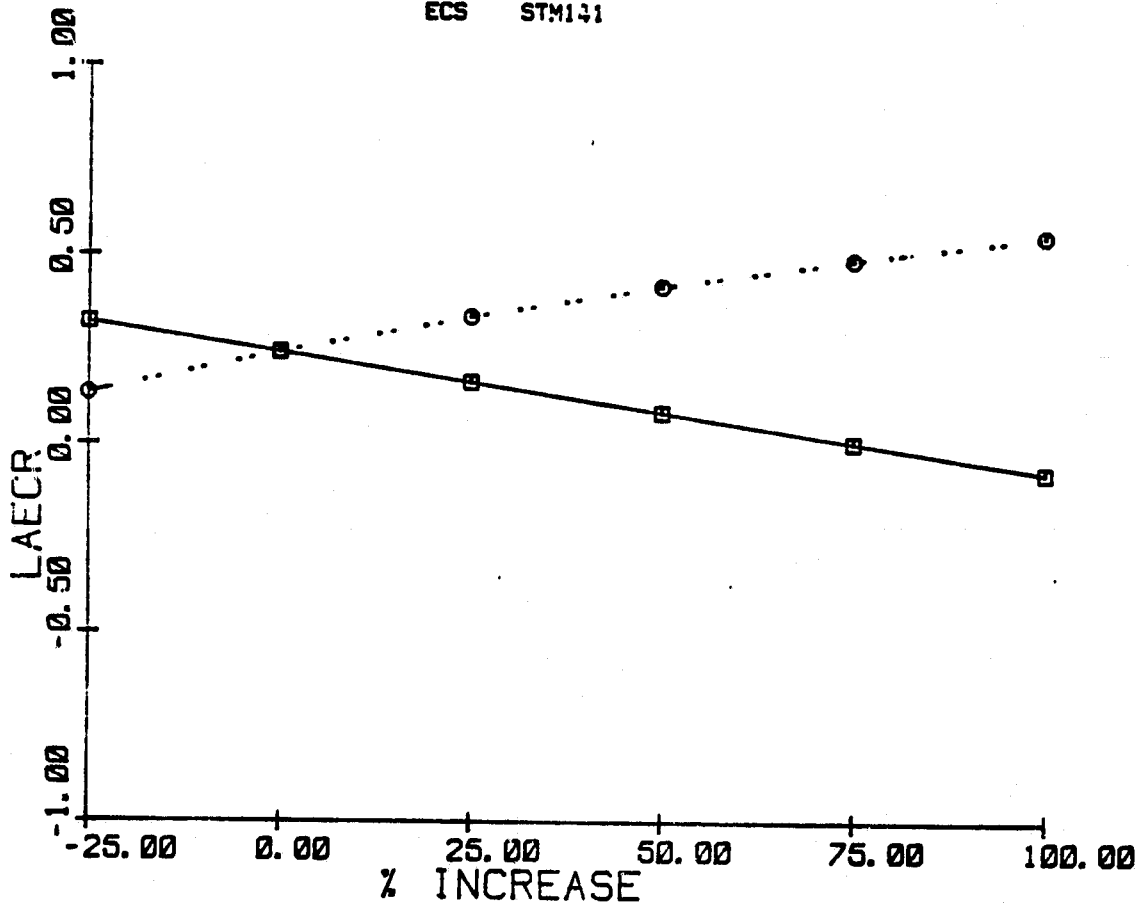
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20461

ECS STM131



BASE CASE

NO COGENERATION

PROCESS

MW- 29

PROCESS HEAT- 659

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.138

CAPITAL COST- 42.8

LAEC - 24.838

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 59.0

LAEC - 18.833

ROI - 0

MW(GEN) - 58

FUEL - COAL-FGD

- — □ CAPITAL COST
- . . . ○ ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 03/08/79

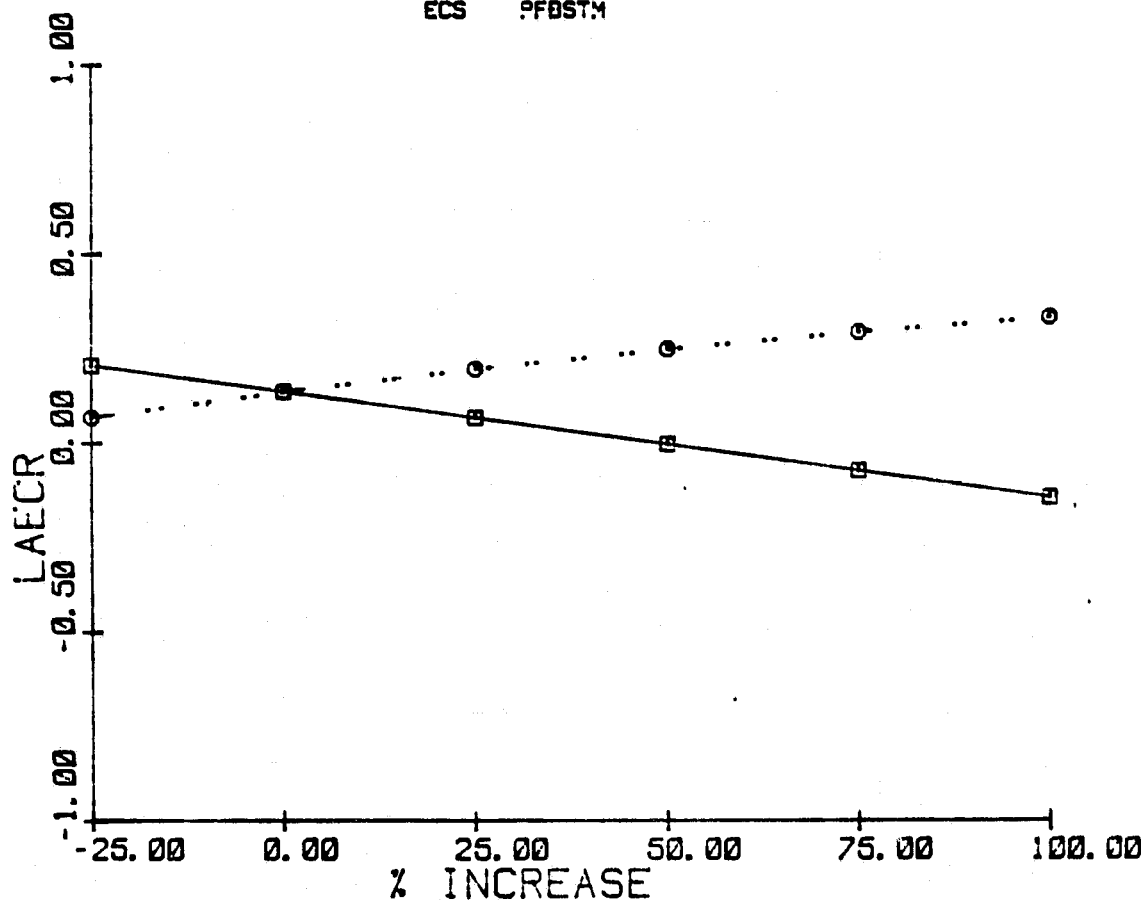
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20461

ECS PFBSTM



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 29		CAPITAL COST- 52.3
PROCESS HEAT- 650	CAPITAL COST- 42.8	LAEC - 21.490
(BTU*10**6)	LAEC - 24.838	ROI - 0
WASTE FUEL- 0	FUEL - COAL-FGD	MW(GEN) - 29
(BTU*10**6)		FUEL - COAL-PFB
POWER/HEAT- 0.138		
—■—	CAPITAL COST	
—○—	ELECTRIC POWER	
	NO-CGN FUEL	
	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/09/79

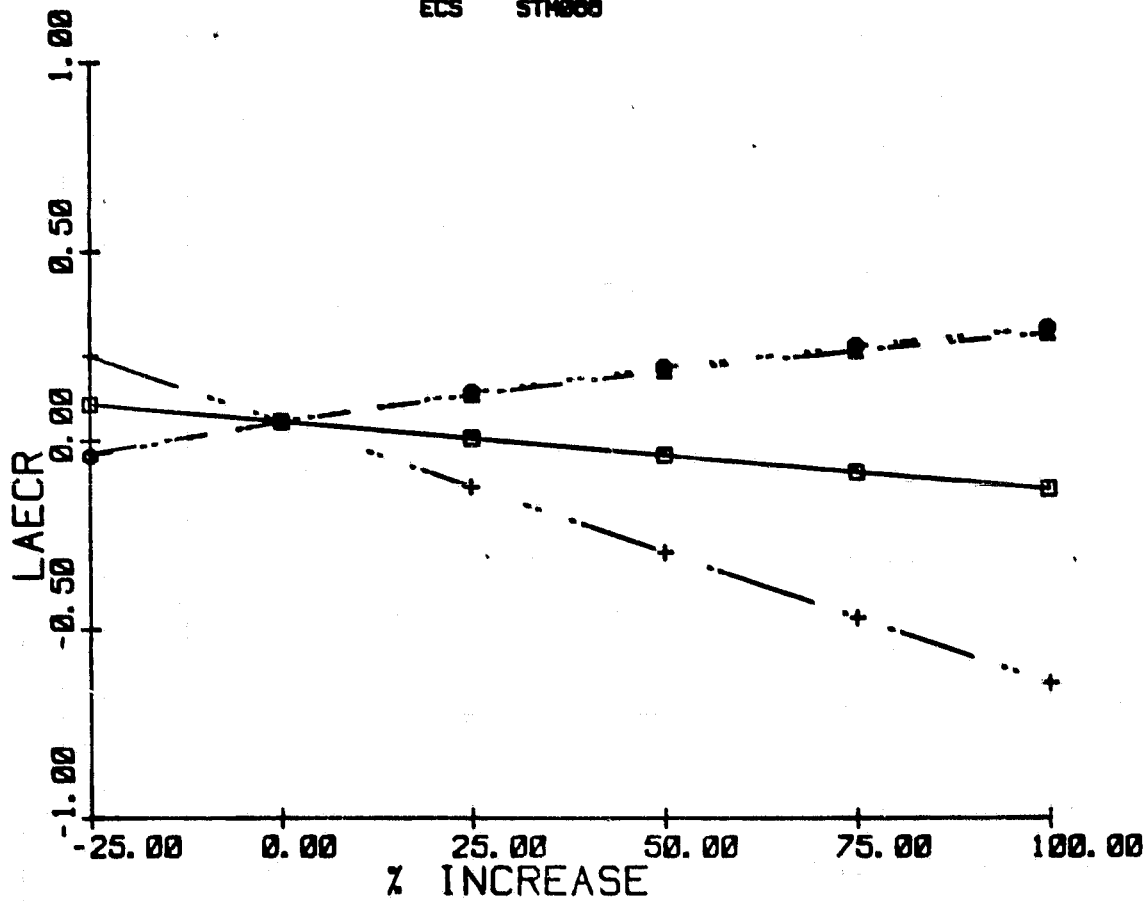
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20021

ECS STM000



BASE CASE

NO COGENERATION

PROCESS

MW- 0

PROCESS HEAT- 00

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.240

CAPITAL COST- 7.1

LAEC - 4.335

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 5.9

LAEC - 4.110

ROI - 0

MW(GEN) - 0

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/08/79

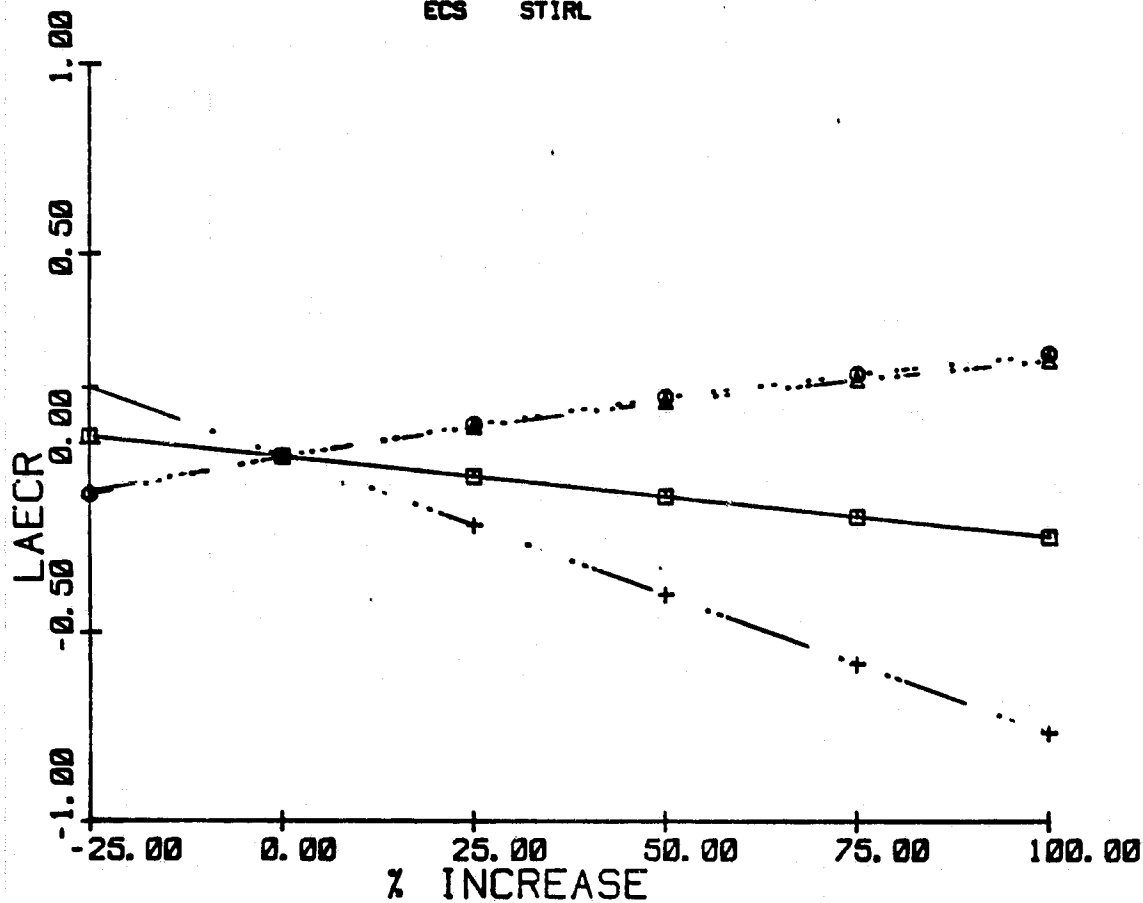
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20021

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 6

PROCESS HEAT- 66

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.240

CAPITAL COST- 7.1

LAEC - 4.335

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 7.0

LAEC - 3.401

ROI - 0

MW(GEN) - 6

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/78

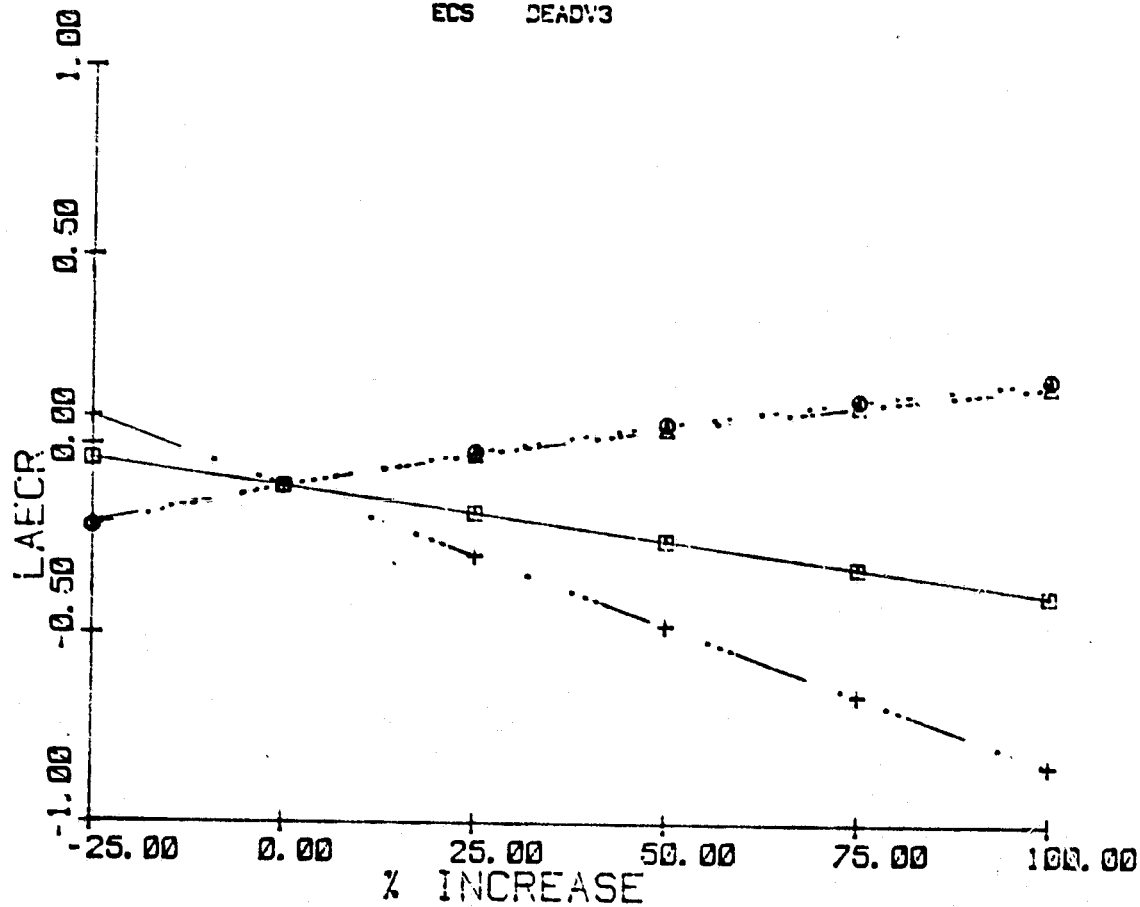
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20021

ECS DEADV3



BASE CASE

NO COGENERATION

PROCESS
MW- 6
PROCESS HEAT- 06
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.240

CAPITAL COST- 7.1
LAEC - 1.325
FUEL - COAL- AFB

COGENERATION

CAPITAL COST- 6.4
LAEC - 1.813
ROI - 0
MW(GEN) - 6
FUEL - RESIDUAL

—■— CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-COGEN FUEL
- - - + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/79

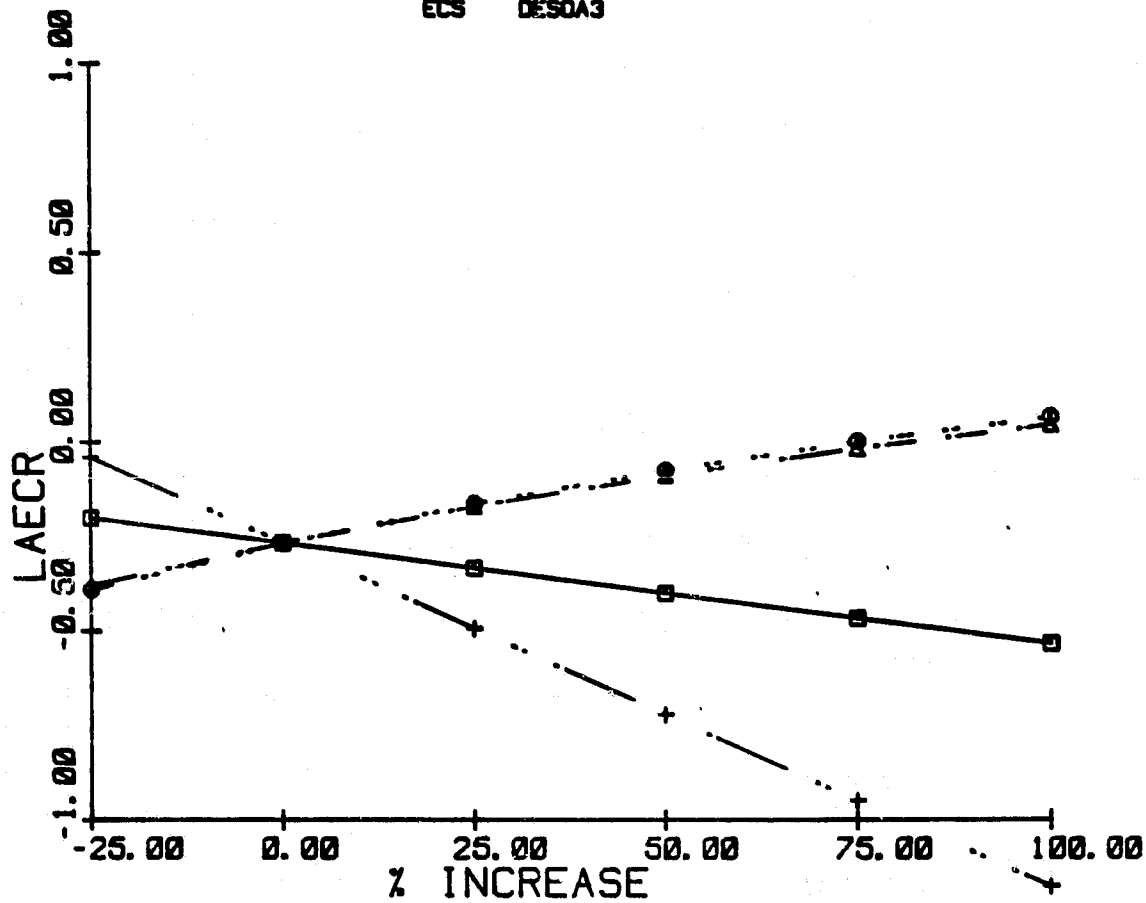
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20621

ECS DES0A3



BASE CASE

NO COGENERATION

PROCESS

MW- 6

PROCESS HEAT- 66

(BTU*10**6)

WASTE FUEL- 6

(BTU*10**6)

POWER/HEAT- 0.240

CAPITAL COST- 7.1

LAEC - 4.335

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 6.6

LAEC - 5.498

ROI - 8

MW(GEN) - 6

FUEL - DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/09/79

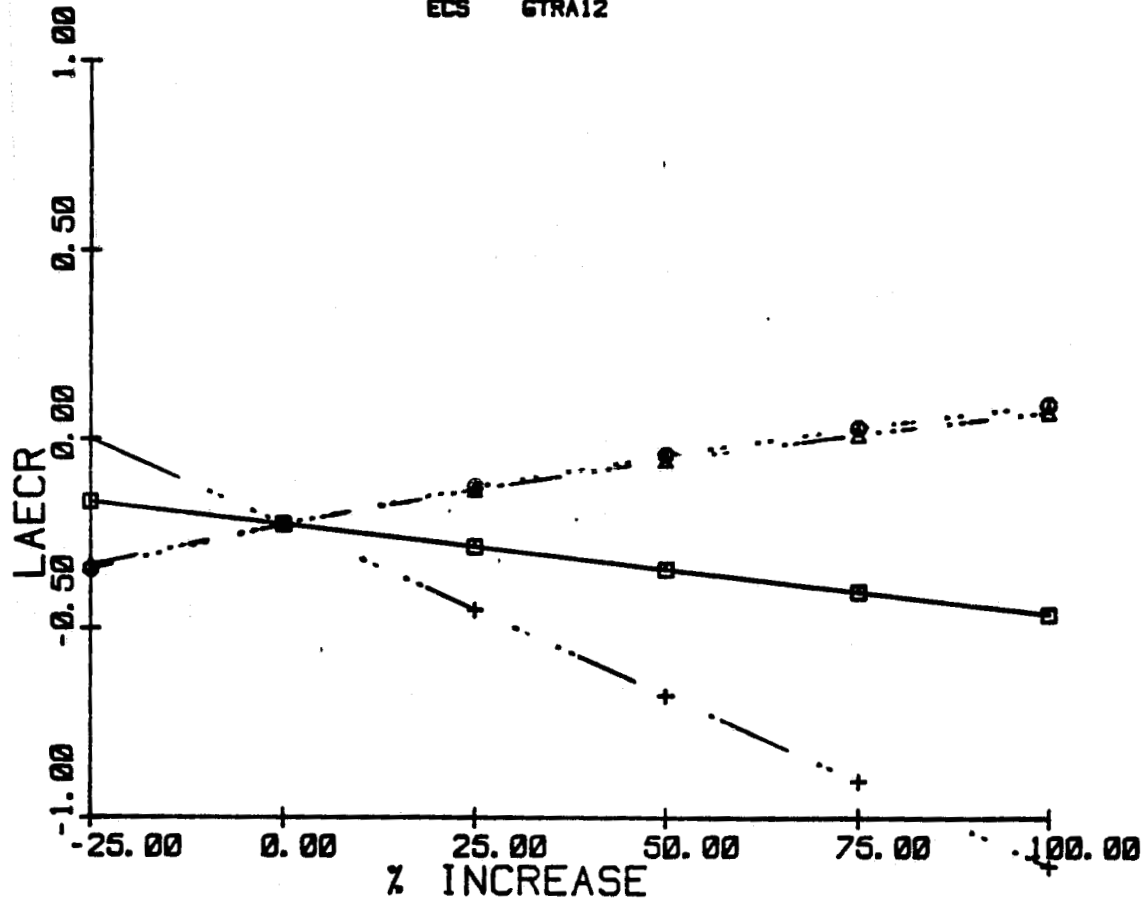
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28021

ECS 6TRA12



BASE CASE

NO COGENERATION

PROCESS

MW- 8

PROCESS HEAT- 88

(BTU*10**6)

WASTE FUEL- 8

(BTU*10**6)

POWER/HEAT- 0.248

CAPITAL COST- 7.1

LAEC

- 4.335

FUEL

- COAL- AFB

COGENERATION

CAPITAL COST- 7.8

LAEC

- 5.309

ROI

- 0

MW(GEN)

- 8

FUEL

- DISTILLA

- — — — □ CAPITAL COST
- ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/09/79

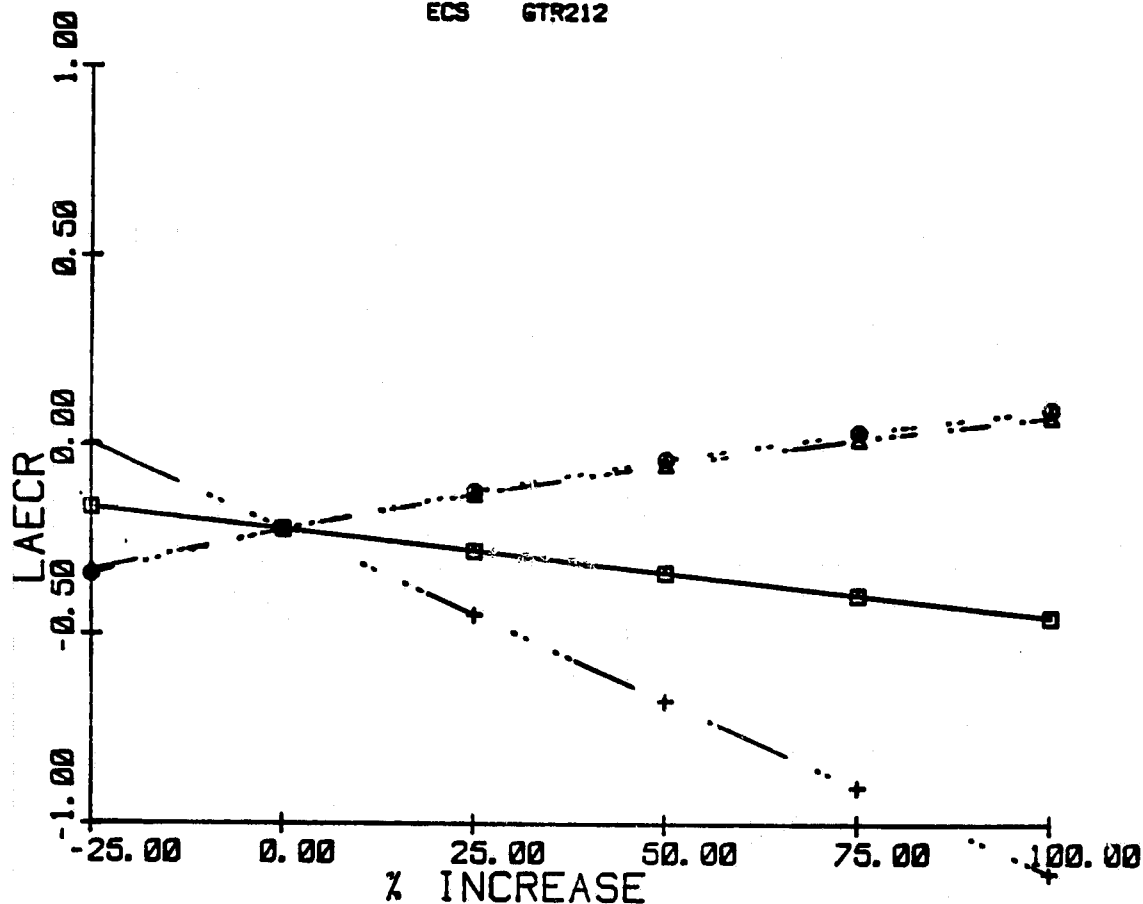
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20021

ECS GTR212



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 0		
PROCESS HEAT- 80		CAPITAL COST- 7.6
(BTU*10**6)	CAPITAL COST- 7.1	LAEC - 5.300
WASTE FUEL- 0	LAEC - 4.335	ROI - 0
(BTU*10**6)	FUEL - COAL-AFB	MW(GEN) - 0
POWER/HEAT- 0.240		FUEL - DISTILLA
— — — — —		
□ — — — — □	CAPITAL COST	
○ — — — — ○	ELECTRIC POWER	
△ — — — — △	NO-CGN FUEL	
+ — — — — +	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/10/79

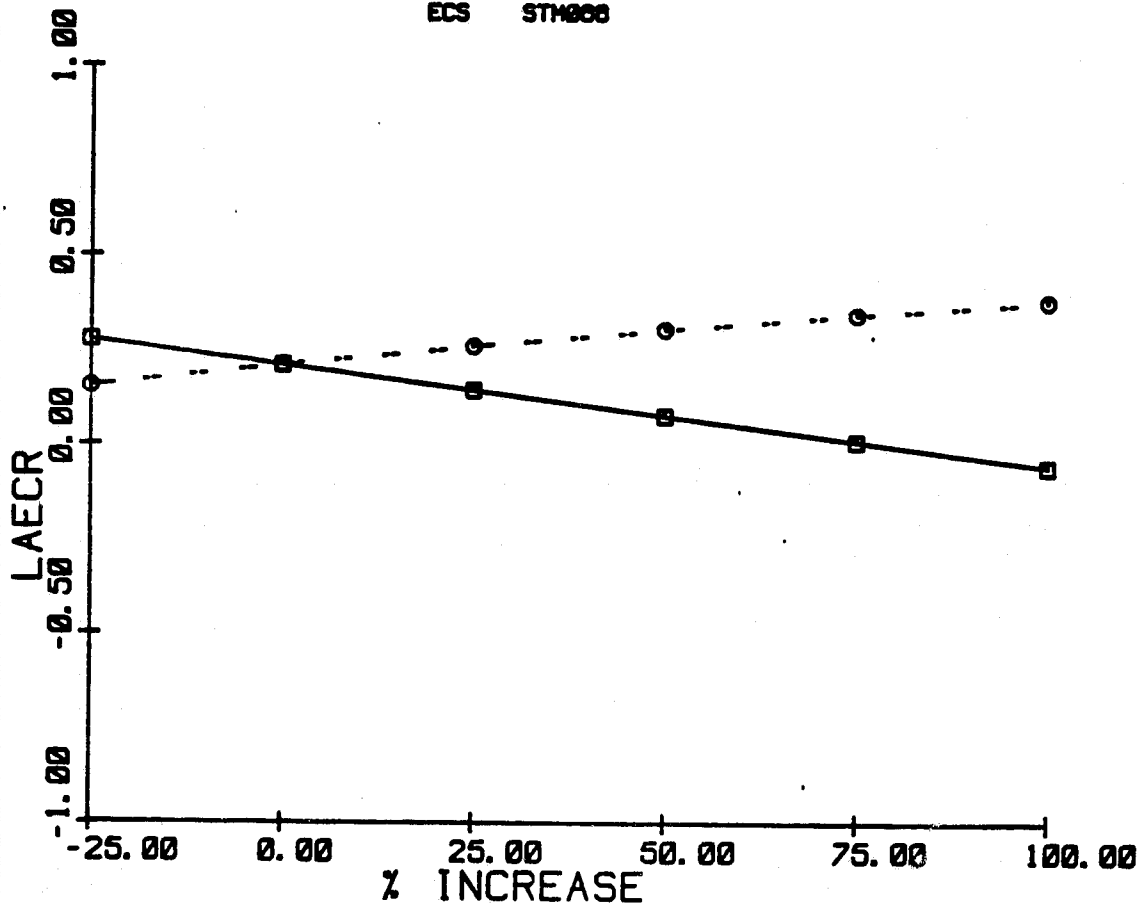
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 22001

ECS STM000



BASE CASE

NO COGENERATION

PROCESS
MW- 8
PROCESS HEAT- 150
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.134

CAPITAL COST- 13.5
LAEC - 6.265
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 12.4
LAEC - 4.954
ROI - 8
MW(GEN) - 7
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

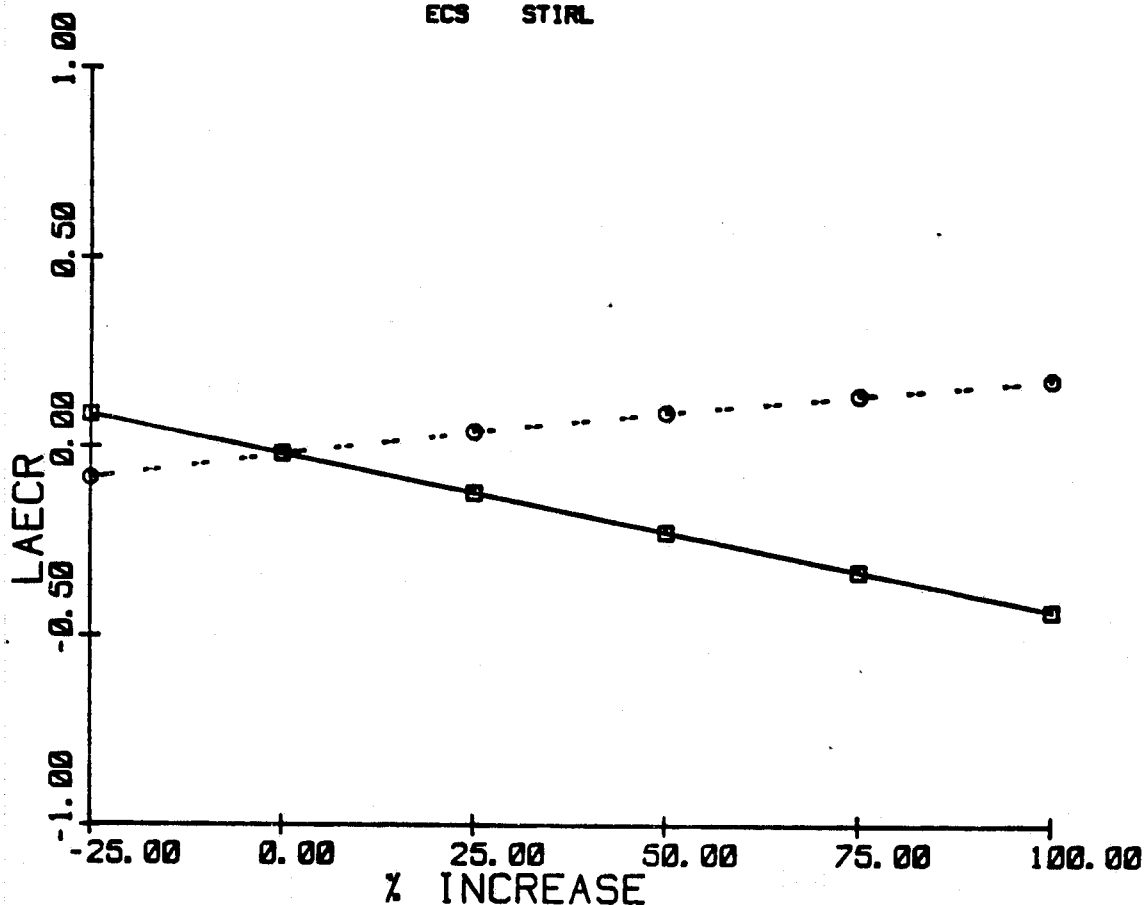
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 22001

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS
MW- 8
PROCESS HEAT- 150
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.134

CAPITAL COST- 13.5
LAEC - 0.205
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.9
LAEC - 0.303
ROI - 0
MW(GEN) - 8
FUEL - COAL

—■— CAPITAL COST
- - - - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

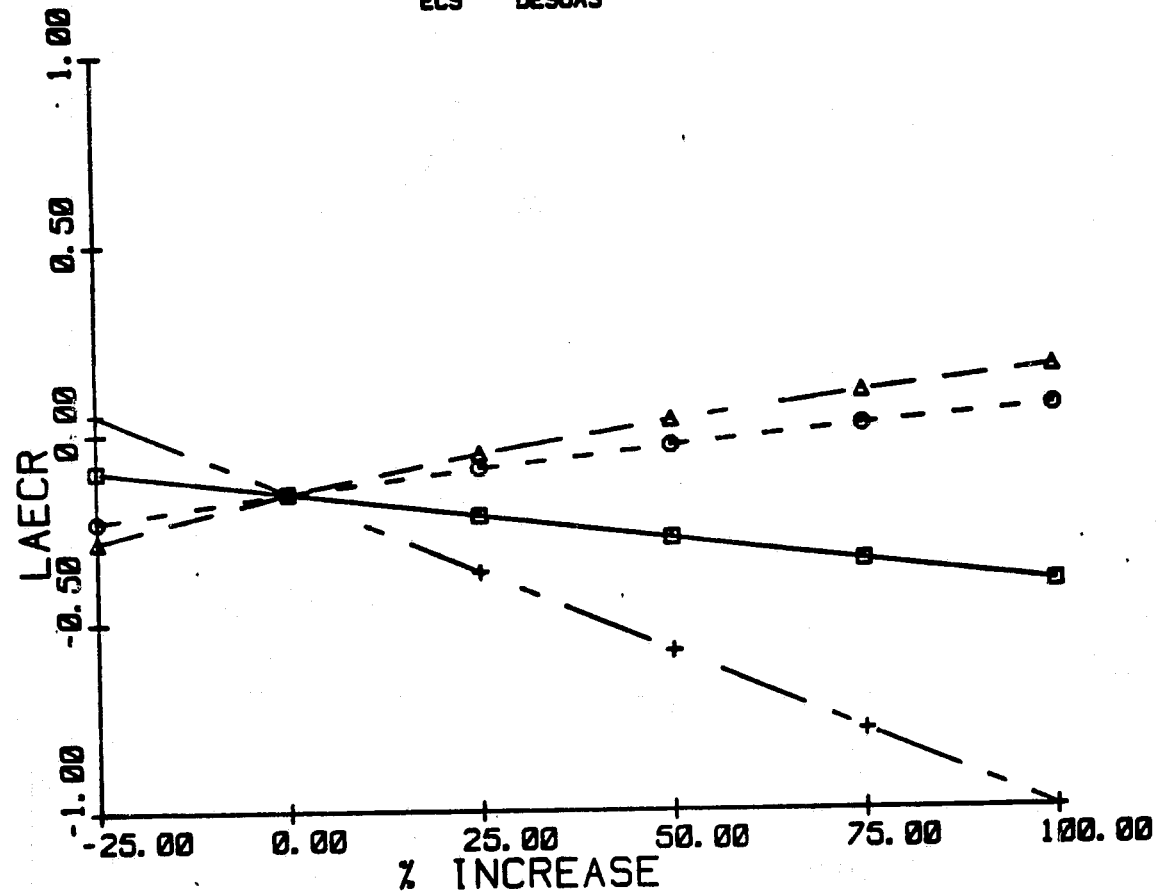
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 22001

ECS DES0A3



BASE CASE

NO COGENERATION

PROCESS
MW- 6
PROCESS HEAT- 150
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.134

CAPITAL COST- 13.5
LAEC - 6.265
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 11.6
LAEC - 7.258
ROI - 8
MW(GEN) - 6
FUEL - RESIDUAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
—▲— NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/18/79

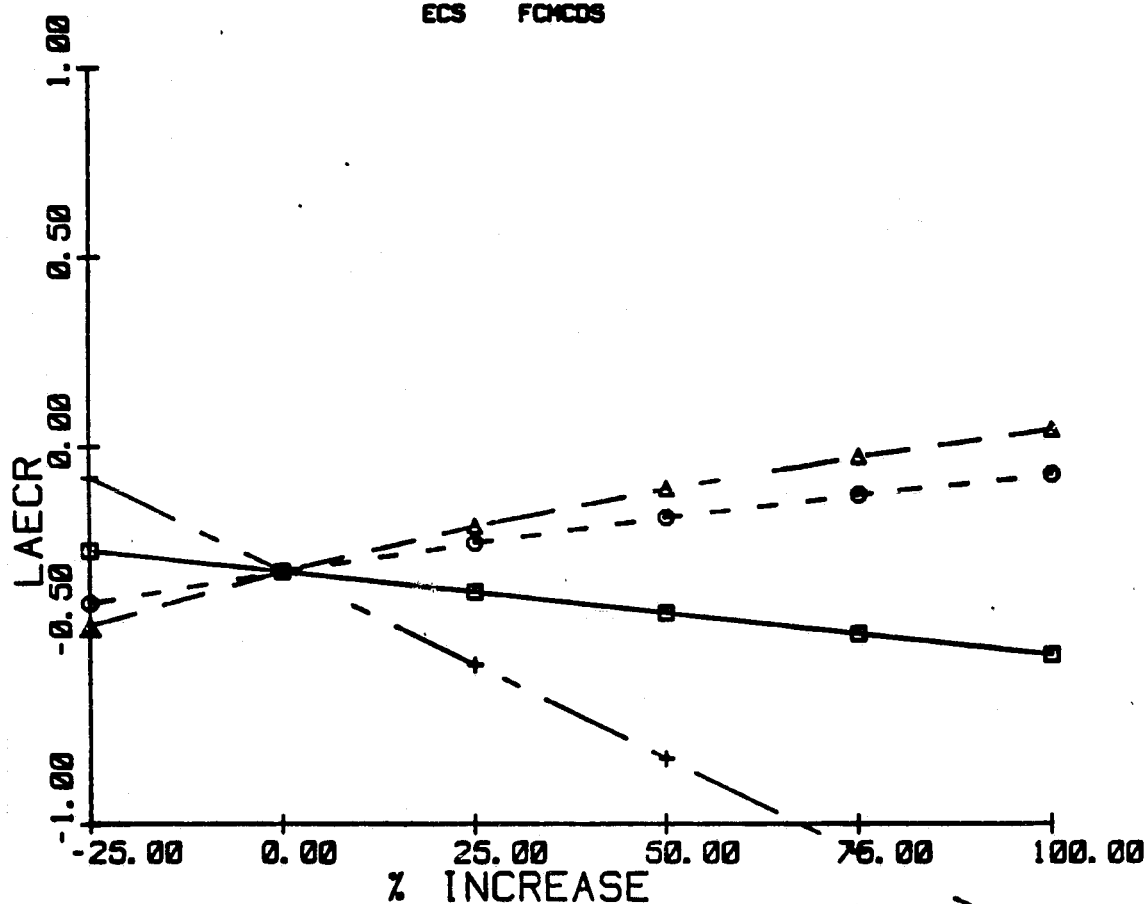
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 22001

ECS FCMDS



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 8
PROCESS HEAT- 150
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.134

CAPITAL COST- 13.5
LAEC - 8.265
FUEL - COAL-FGD

CAPITAL COST- 10.6
LAEC - 8.339
ROI - 0
MW(GEN) - 8
FUEL - DISTILLA

— — — — — CAPITAL COST
- - - - - ELECTRIC POWER
— — — — — NO-CGN FUEL
+ + + + + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

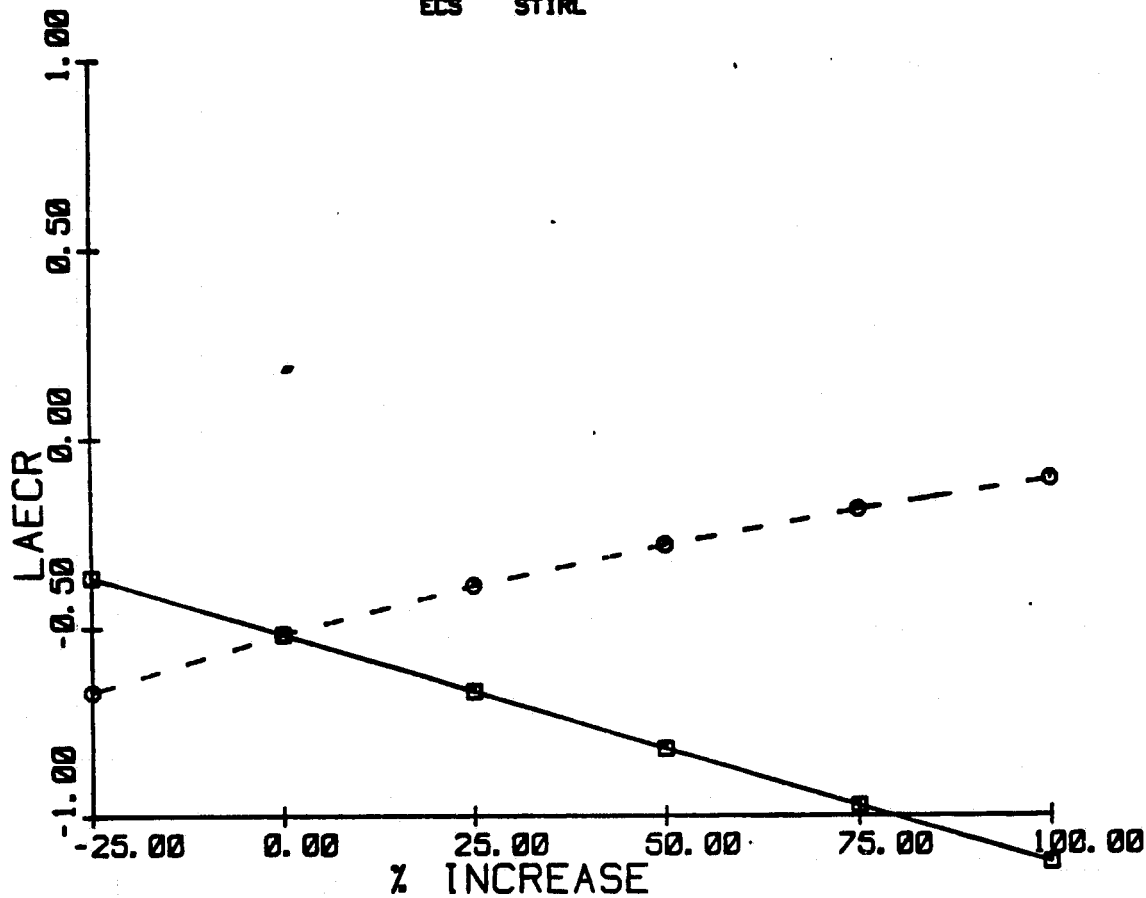
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24211

ECS STIRL



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 2		CAPITAL COST- 2.9
PROCESS HEAT- 30	CAPITAL COST- 1.8	LAEC - 0.954
(BTU*10**6)	LAEC - 0.020	ROI - 0
WASTE FUEL- 24	FUEL - RESIDUAL	MW(GEN) - 2
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 0.171		

—■—	CAPITAL COST
-○-	ELECTRIC POWER
	NO-CGN FUEL
	ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/10/79

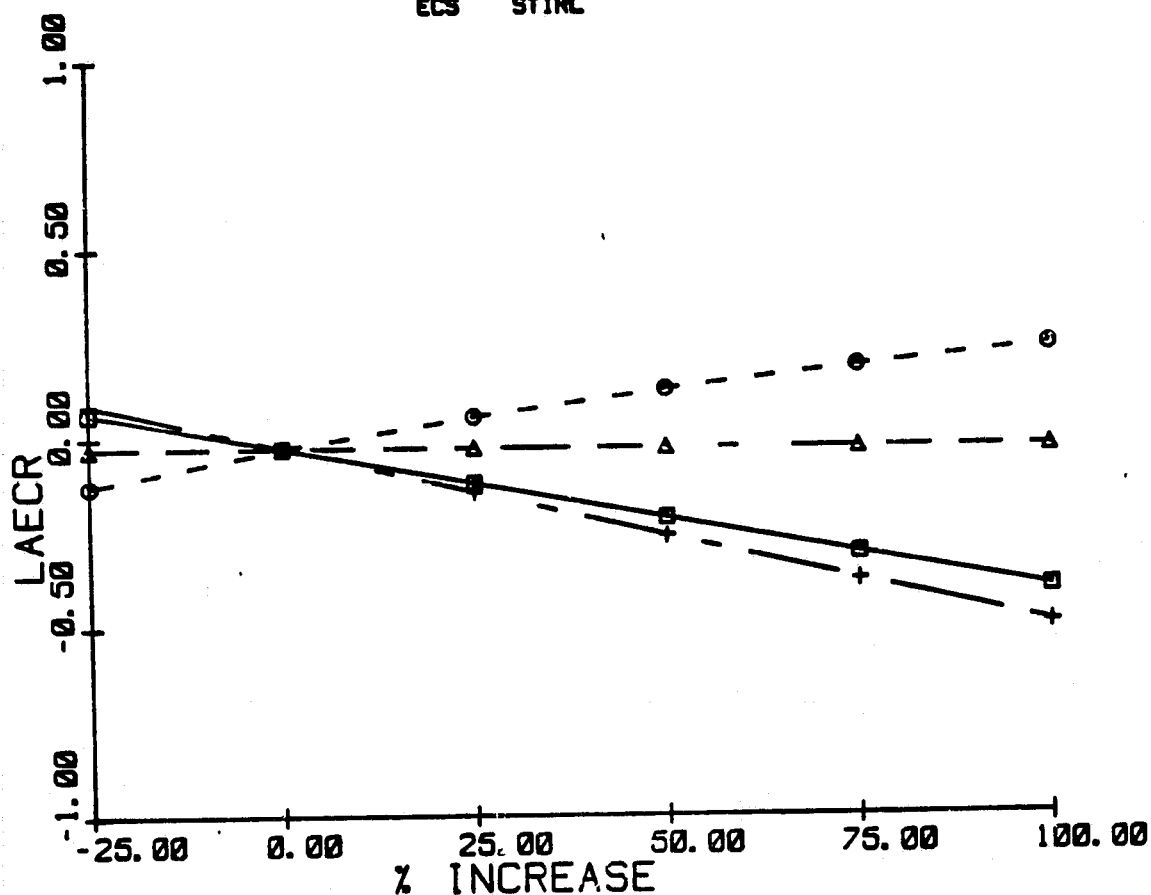
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24301

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 3

PROCESS HEAT- 75

(BTU*10**6)

WASTE FUEL- 84

(BTU*10**6)

POWER/HEAT- 0.136

CAPITAL COST- 0.5

LAEC - 1.900

FUEL - COAL - AFB

COGENERATION

CAPITAL COST- 5.6

LAEC - 2.035

ROI - 0

MW(GEN) - 3

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

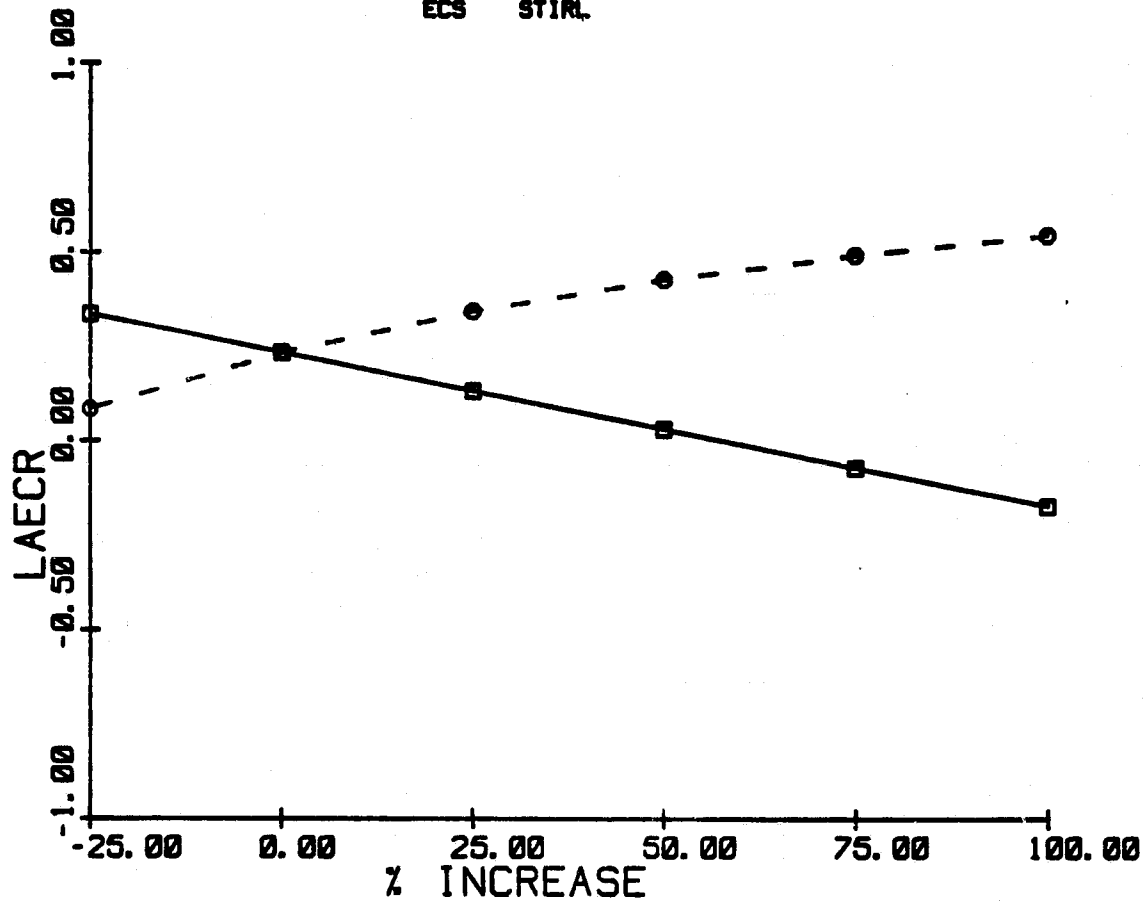
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24021

ECS STIRL



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 5		CAPITAL COST-7.7
PROCESS HEAT- 37	CAPITAL COST- 4.1	LAEC - 1.900
(BTU*10**6)	LAEC - 2.480	ROI - 0
WASTE FUEL- 41	FUEL - COAL-AFB	MW(GEN) - 5
(BTU*10**6)		FUEL - COAL
POWER/HEAT- 0.461		
—■—■—	CAPITAL COST	
—○—○—	ELECTRIC POWER	
	NO-CGN FUEL	
	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/18/79

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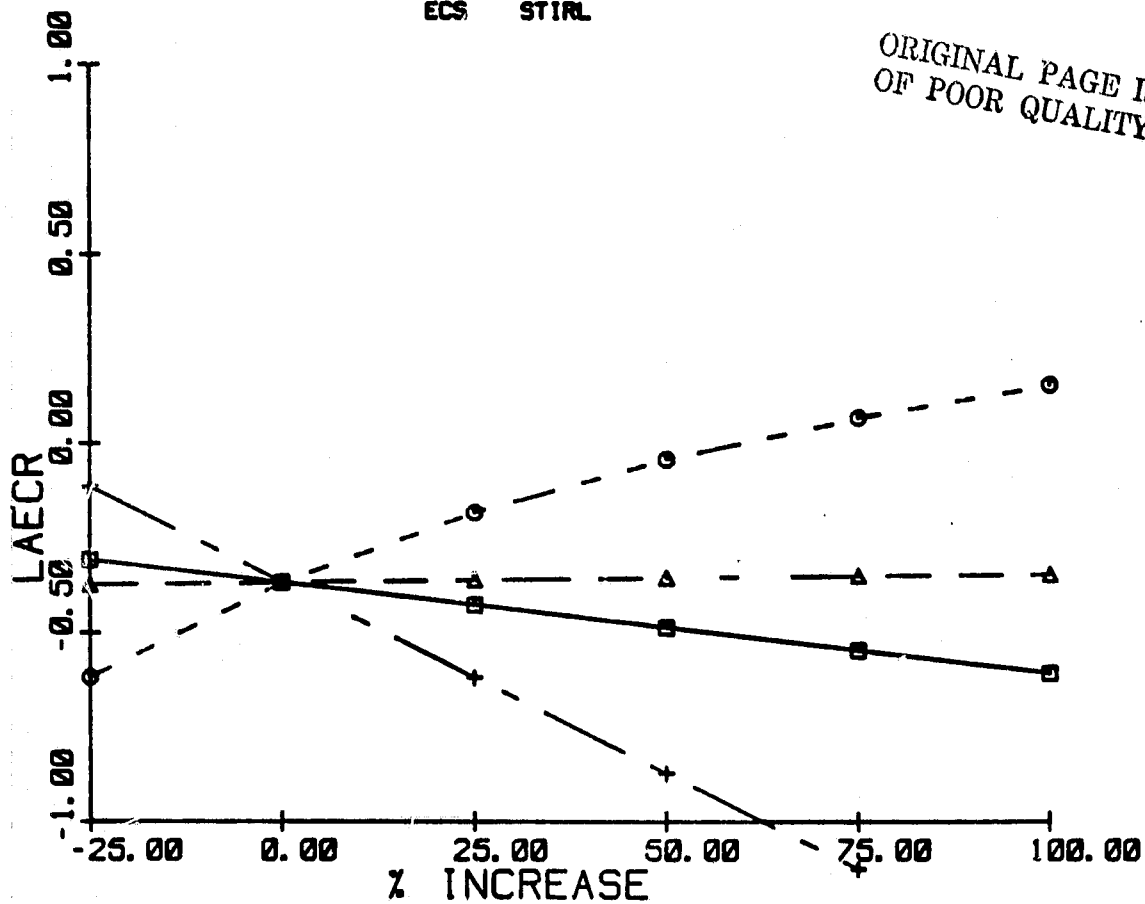
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24921

ECS STIRL

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OF POOR QUALITY



BASE CASE
NO COGENERATION

COGENERATION

PROCESS
MW- 5
PROCESS HEAT- 37
(BTU*10**6)
WASTE FUEL- 3
(BTU*10**6)
POWER/HEAT- 0.161

CAPITAL COST- 4.1
LAEC - 2.188
FUEL - COAL-AFB

CAPITAL COST- 4.8
LAEC - 3.103
ROI - 8
MW(GEN) - 5
FUEL - DISTILLA

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
- - - △ - NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

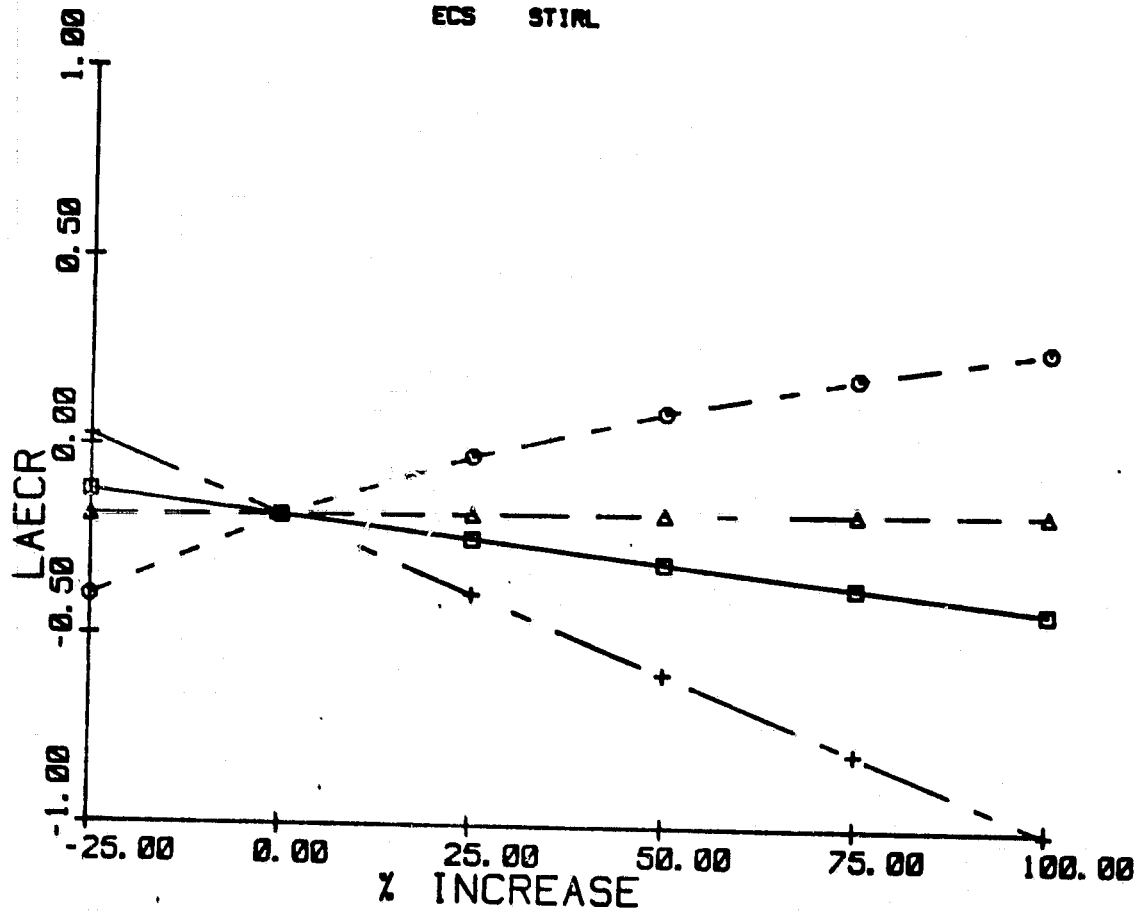
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24021

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 5

PROCESS HEAT- 37

(BTU*10**6)

WASTE FUEL- 3

(BTU*10**6)

POWER/HEAT- 0.401

CAPITAL COST- 4.4

LAEC - 2.480

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 4.6

LAEC - 2.940

ROI - 0

MW(GEN) - 5

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

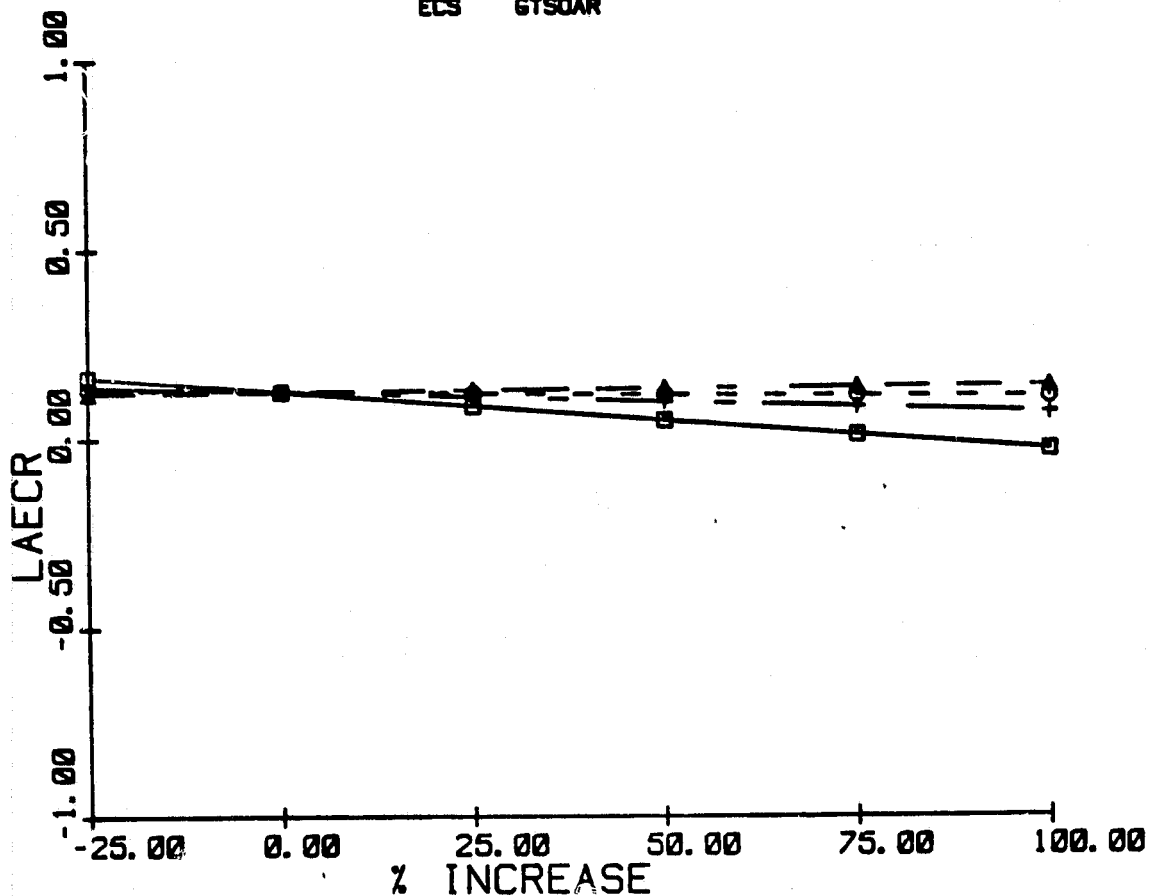
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 24021

ECS GTSOAR



BASE CASE

NO COGENERATION

PROCESS

MW- 5

PROCESS HEAT- 37

(BTU*10**6)

WASTE FUEL- 41

(BTU*10**6)

POWER/HEAT- 0.161

CAPITAL COST- 4.1

LAEC - 2.466

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 3.0

LAEC - 2.160

ROI - 0

MW(GEN) - 0

FUEL - RESIDUAL

- ——— □ CAPITAL COST
- ——— ○ ELECTRIC POWER
- △ ——— △ NO-CGN FUEL
- + ——— + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

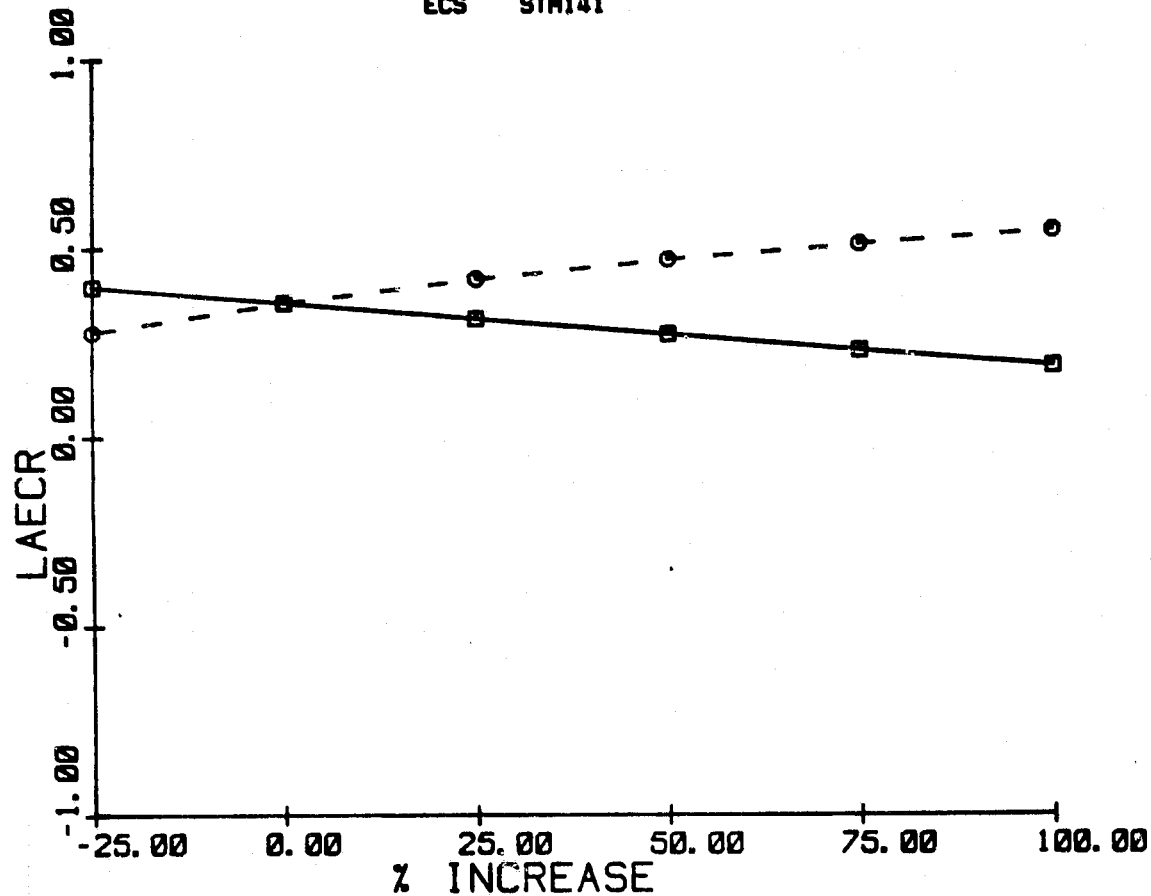
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26212

ECS STH141



BASE CASE

NO COGENERATION

PROCESS
MW- 50
PROCESS HEAT- 700
(BTU*10**6)
WASTE FUEL- 353
(BTU*10**6)
POWER/HEAT- 0.219

CAPITAL COST- 47.9
LAEC - 33.879
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 42.6
LAEC - 21.832
ROI - 0
MW(GEN) - 47
FUEL - COAL-AF9

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

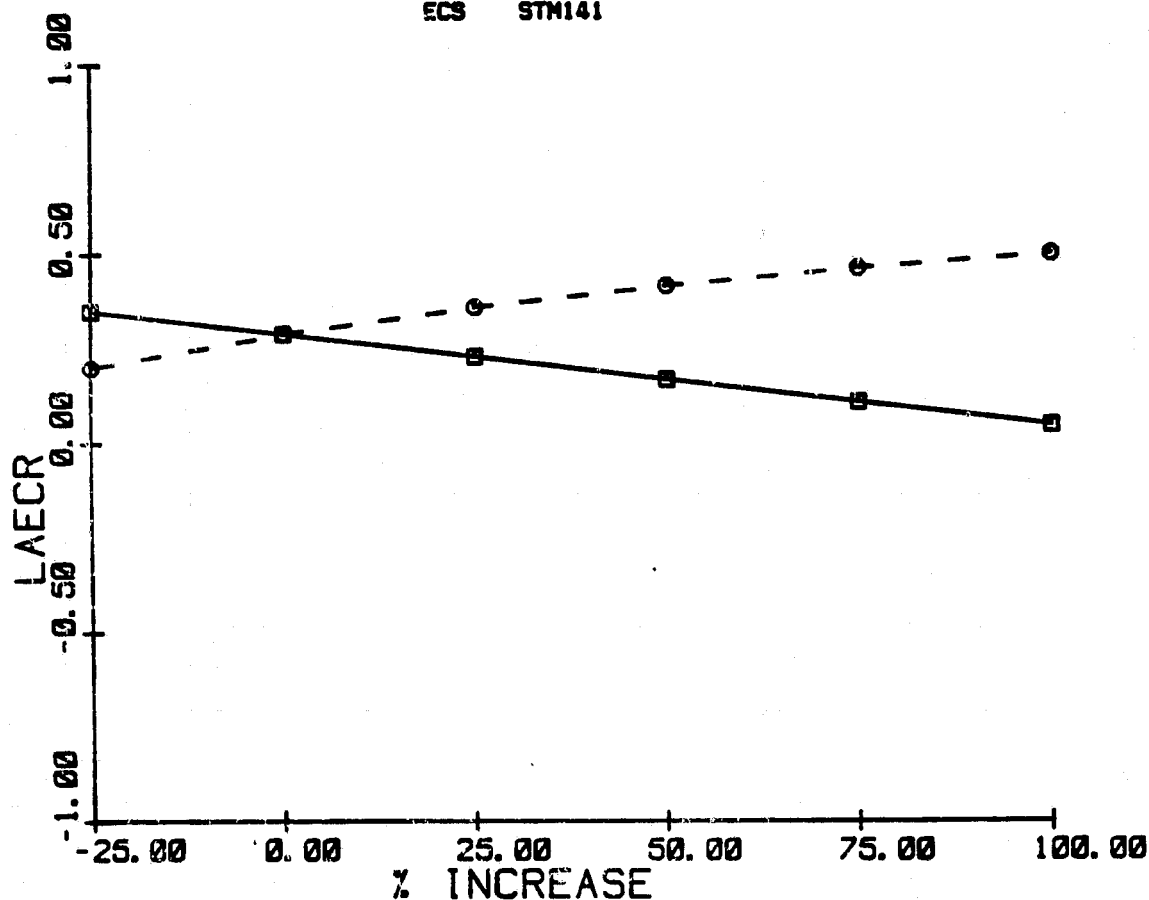
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26212

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 50
PROCESS HEAT- 700
(BTU*10**6)
WASTE FUEL- 353
(BTU*10**6)
POWER/HEAT- 0.219

CAPITAL COST- 47.9
LAEC - 33.870
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 81.3
LAEC - 24.121
ROI - 0
MW(GEN) - 47
FUEL - COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

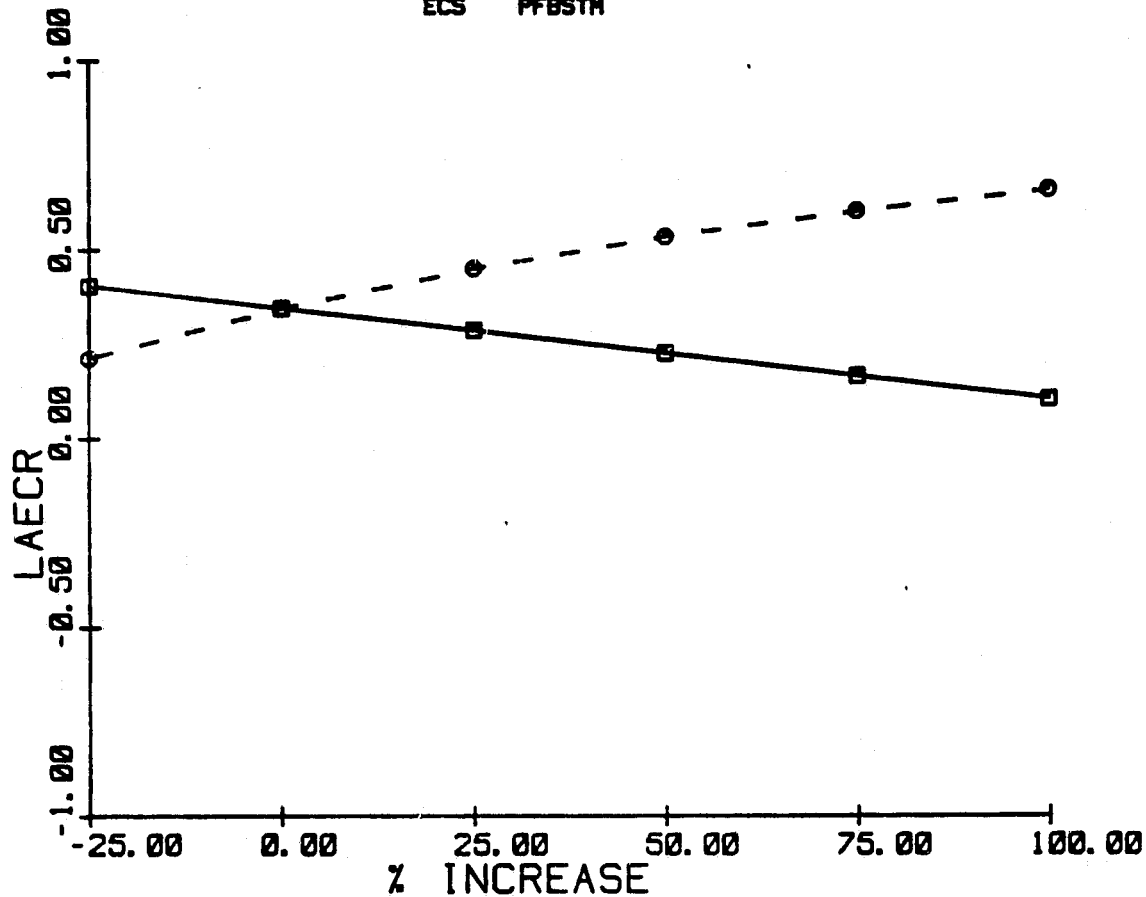
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26212

ECS PFBSTH



BASE CASE

NO COGENERATION

PROCESS

MW- 50

PROCESS HEAT- 700

(BTU*10**6)

WASTE FUEL- 353

(BTU*10**6)

POWER/HEAT- 0.219

CAPITAL COST- 47.9

LAEC - 33.870

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 00.9

LAEC - 22.210

ROI - 8

MW(GEN) - 77

FUEL - COAL-PFB

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

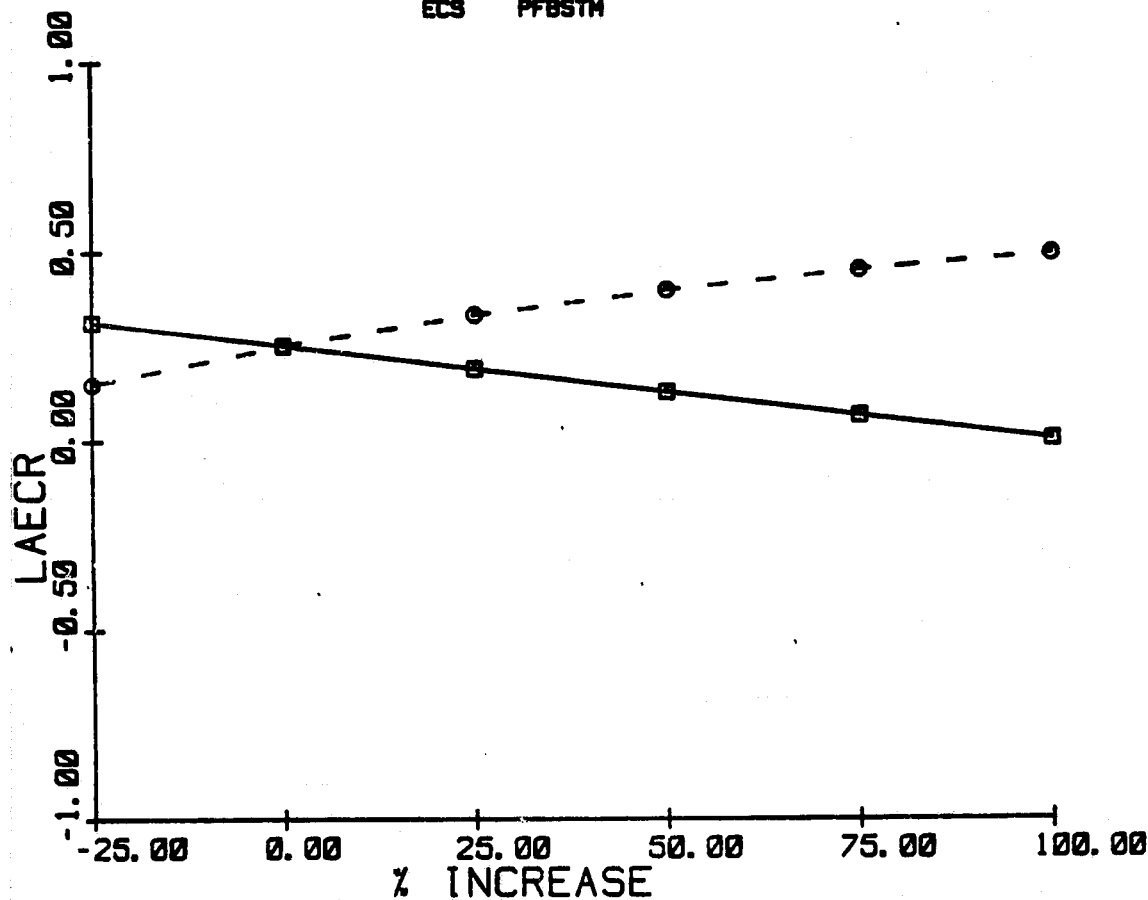
PAGE 115

COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20212

ECS PFBSTM



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 50		CAPITAL COST- 63.2
PROCESS HEAT- 700.	CAPITAL COST- 47.9	LAEC - 25.370
(BTU*10**6)	LAEC - 33.879	ROI - 0
WASTE FUEL- 353	FUEL - COAL-FGD	MW(GEN) - 50
(BTU*10**6)		FUEL - COAL-PFB
POWER/HEAT- 0.219		
— — — — —	CAPITAL COST	
— — — — —	ELECTRIC POWER	
	NO-CGN FUEL	
	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/18/70

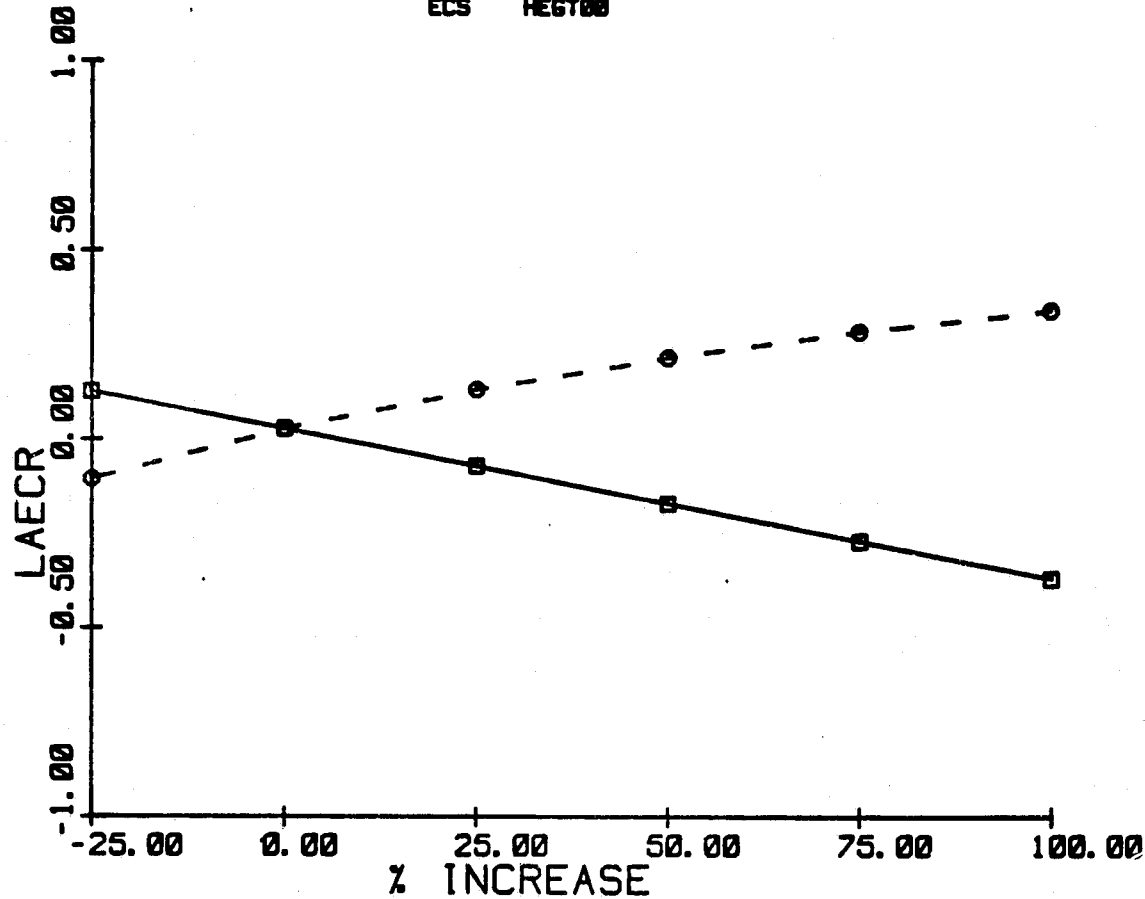
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20212

ECS HEGT00



BASE CASE

PROCESS

MW- 50

PROCESS HEAT- 700

(BTU*10**6)

WASTE FUEL- 353

(BTU*10**6)

POWER/HEAT- 0.219

NO COGENERATION

CAPITAL COST- 47.9

LAEC - 33.079

FUEL - COAL-F60

COGENERATION

CAPITAL COST- 100.7

LAEC - 32.903

ROI - 0

MW(GEN) - 50

FUEL - COAL-AFB

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

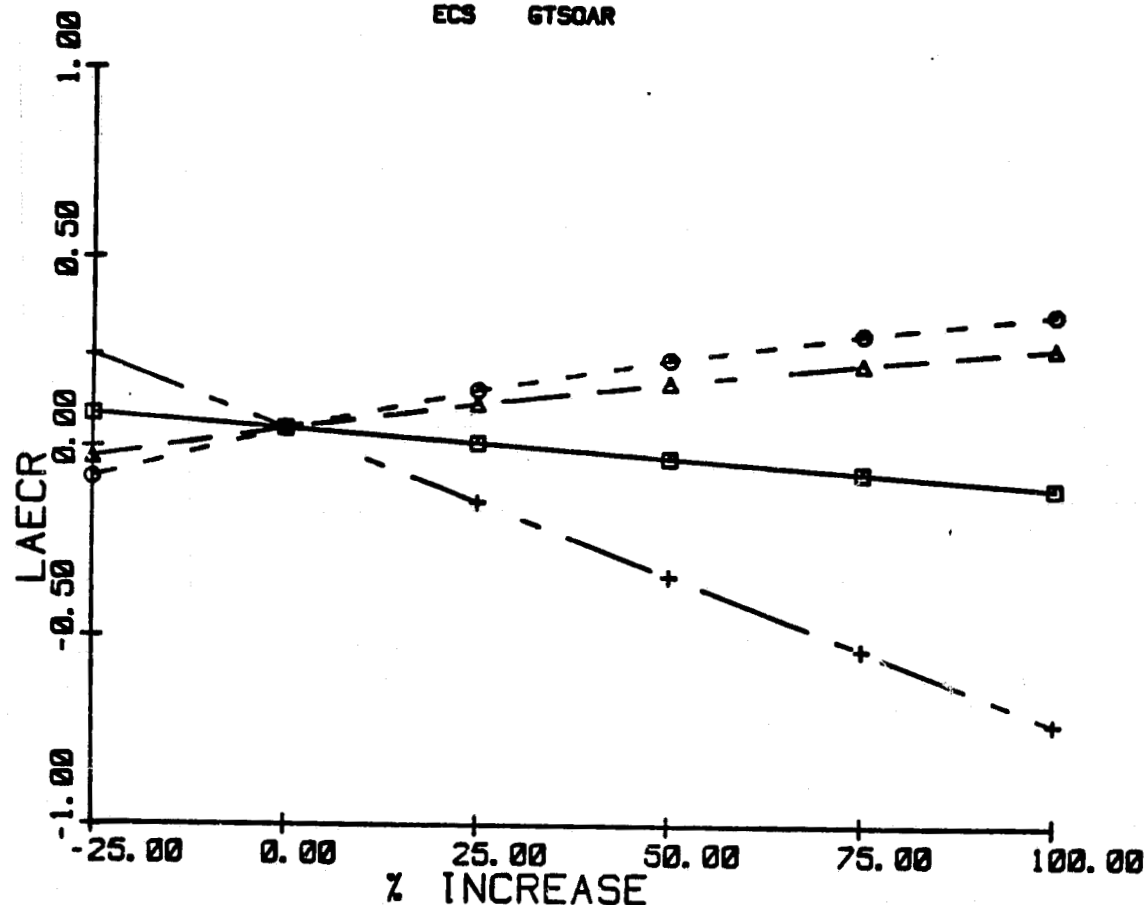
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28212

ECS GTSQAR



BASE CASE

NO COGENERATION

PROCESS
MW- 50
PROCESS HEAT- 700
(BTU*10**6)
WASTE FUEL- 353
(BTU*10**6)
POWER/HEAT- 0.219

CAPITAL COST- 47.9
LAEC - 33.879
FUEL - COAL-F60

COGENERATION

CAPITAL COST- 39.9
LAEC - 32.278
ROI - 8
MW(GEN) - 50
FUEL - RESIDUAL

— — — — — CAPITAL COST
— — — — — ELECTRIC POWER
— — — — — NO-CGN FUEL
— — — — — ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

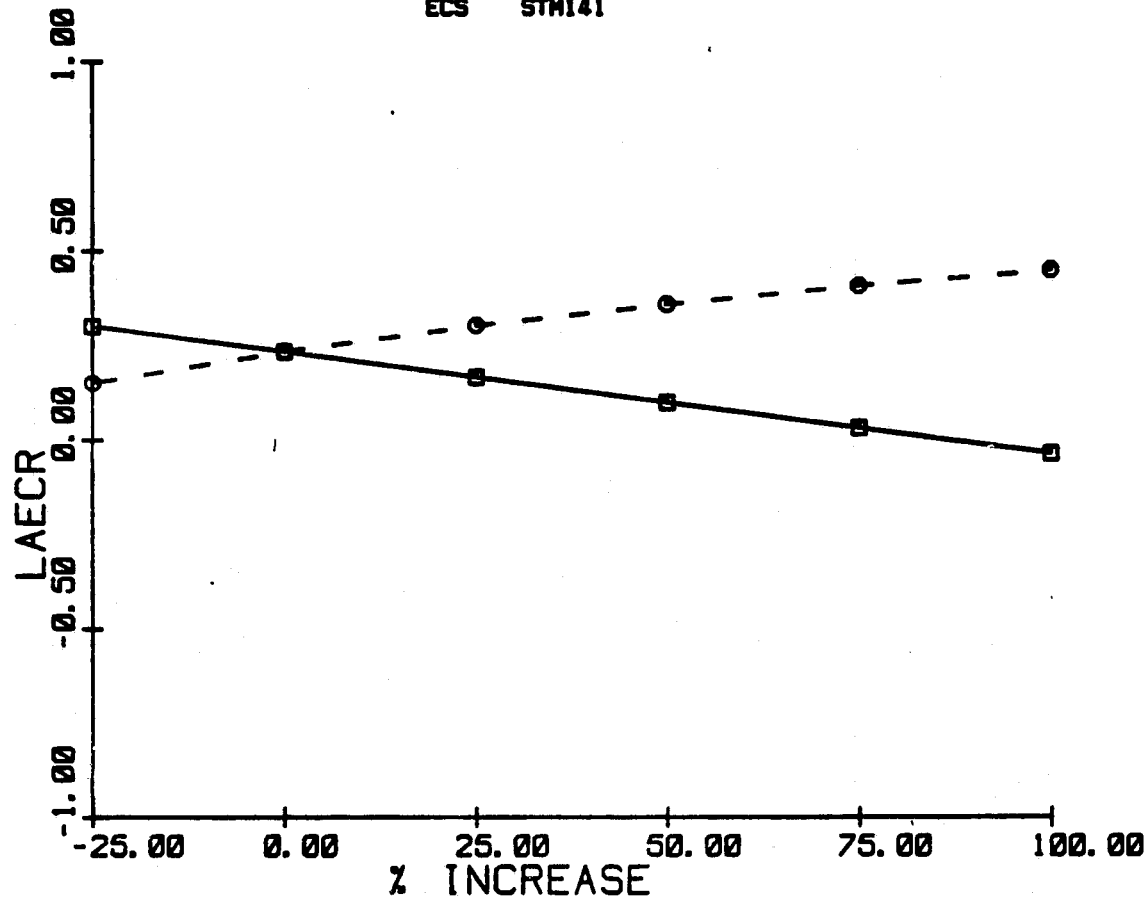
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20214

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 20

PROCESS HEAT- 610

(BTU*10**6)

WASTE FUEL- 250

(BTU*10**6)

POWER/HEAT- 0.162

CAPITAL COST- 40.7

LAEC - 24.075

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 48.8

LAEC - 18.476

ROI - 8

MW(GEN) - 20

FUEL - COAL-FGD

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

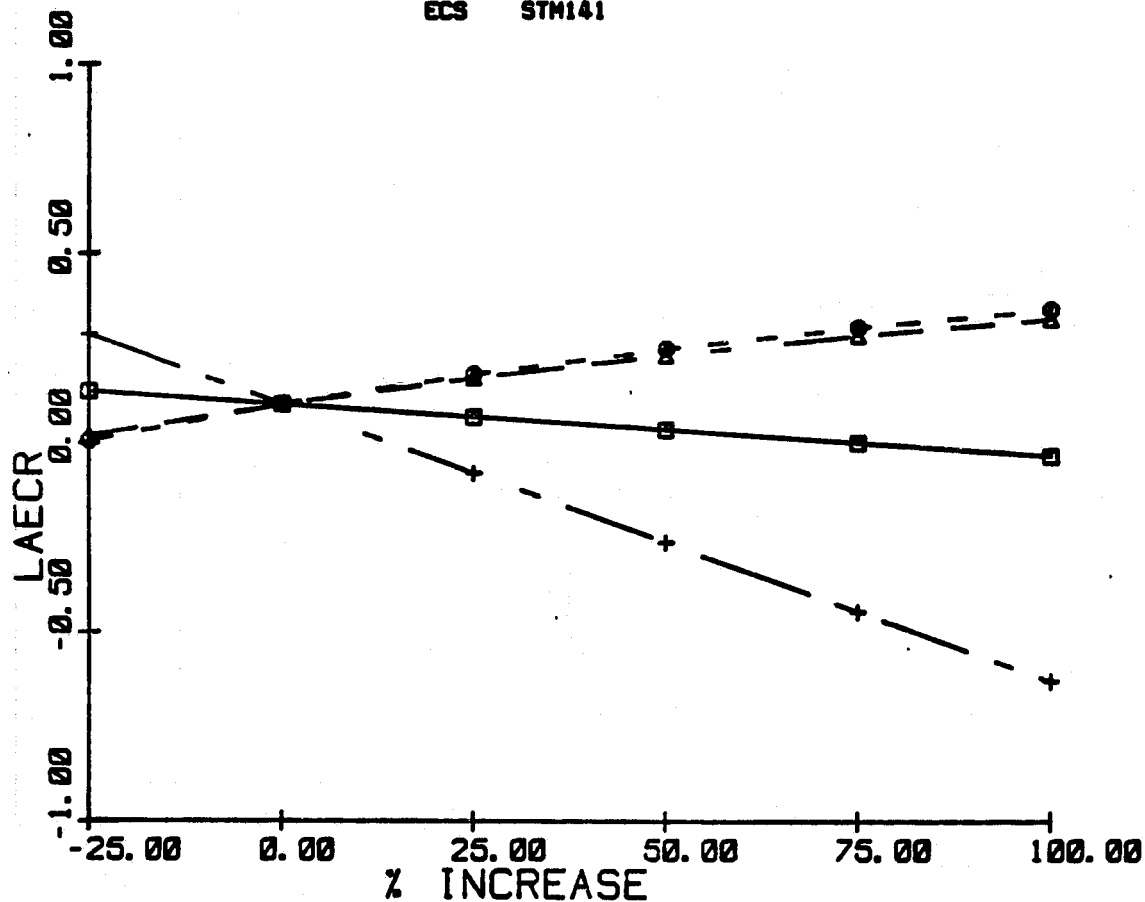
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20214

ECS STM141



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 20		CAPITAL COST- 24.1
PROCESS HEAT- 810	CAPITAL COST- 40.7	LAEC - 21.624
(BTU*10**6)	LAEC - 24.075	ROI - 0
WASTE FUEL- 250	FUEL - COAL-FGD	MW(GEN) - 20
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 0.102		

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

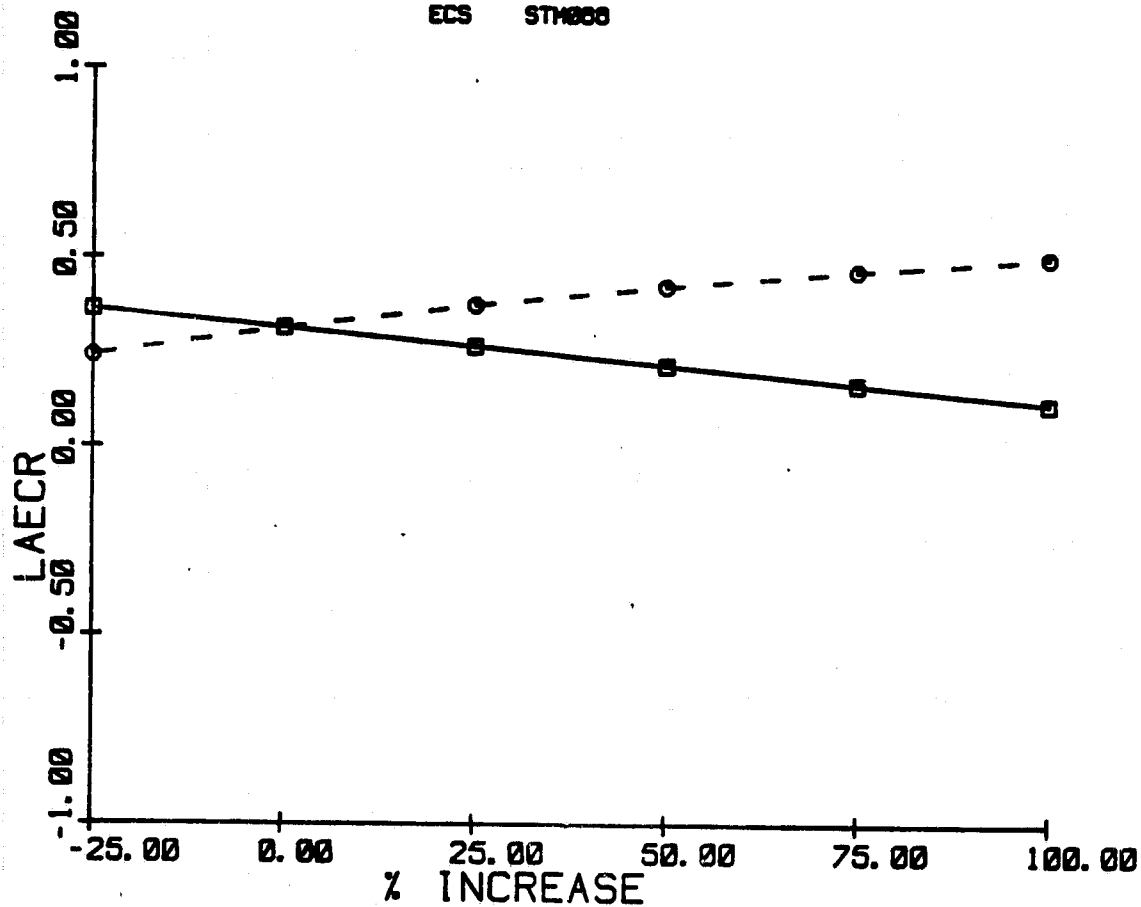
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20214

ECS STM000



BASE CASE

NO COGENERATION

PROCESS

MW- 29

PROCESS HEAT- 610

(BTU*10**6)

WASTE FUEL- 250

(BTU*10**6)

POWER/HEAT- 0.102

CAPITAL COST- 40.7

LAEC - 24.075

FUEL - COAL-F60

COGENERATION

CAPITAL COST- 35.0

LAEC - 10.530

ROI - 0

MW(GEN) - 29

FUEL - COAL-AFB

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

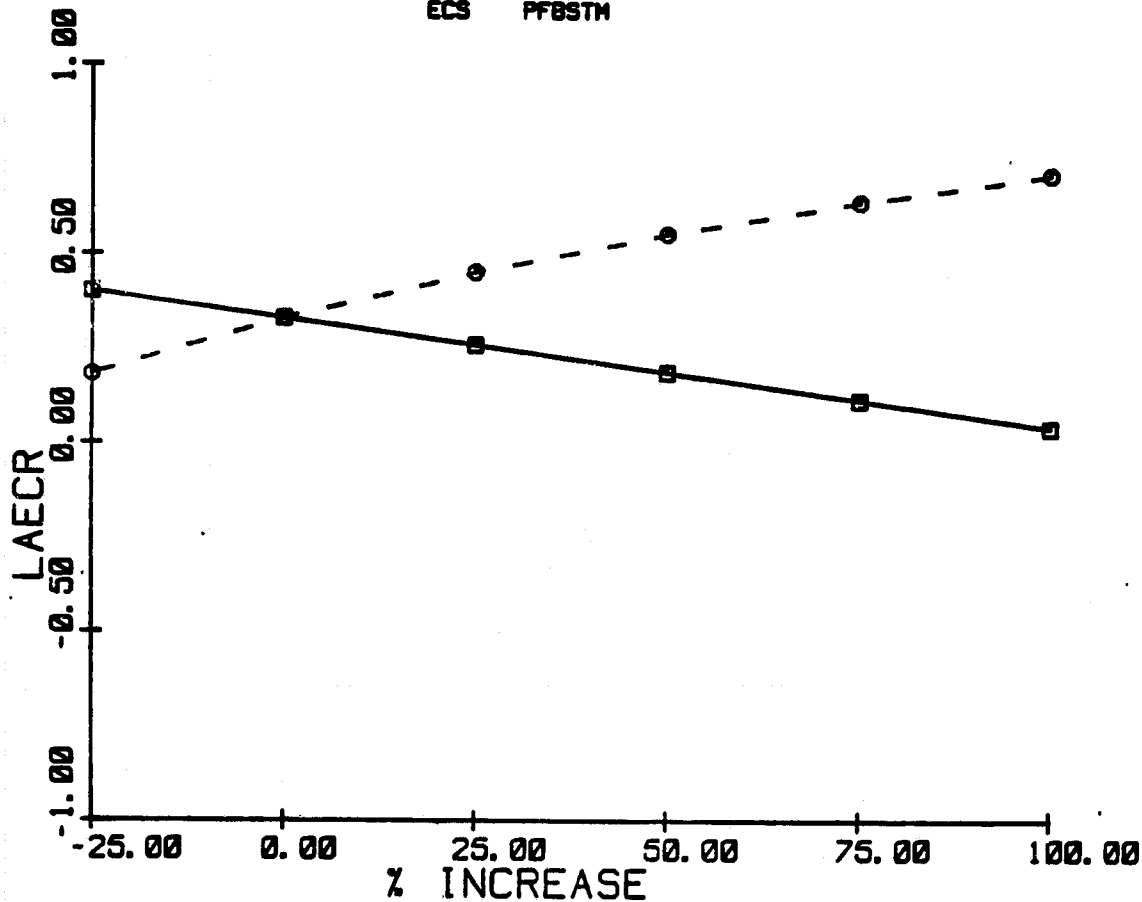
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26214

ECS PFBSTM



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 29		CAPITAL COST- 52.2
PROCESS HEAT- 810	CAPITAL COST- 48.7	LAEC - 16.178
(BTU*10**6)	LAEC - 24.875	ROI - 8
WASTE FUEL- 250	FUEL - COAL-FGD	MW(GEN) - 62
(BTU*10**6)		FUEL - COAL-PFB
POWER/HEAT- 0.182		
<div> <div>—■—</div> <div>—○—</div> </div>	<div> <div>—■—</div> <div>—○—</div> </div>	
	CAPITAL COST	
	ELECTRIC POWER	
	NO-CGN FUEL	
	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/10/70

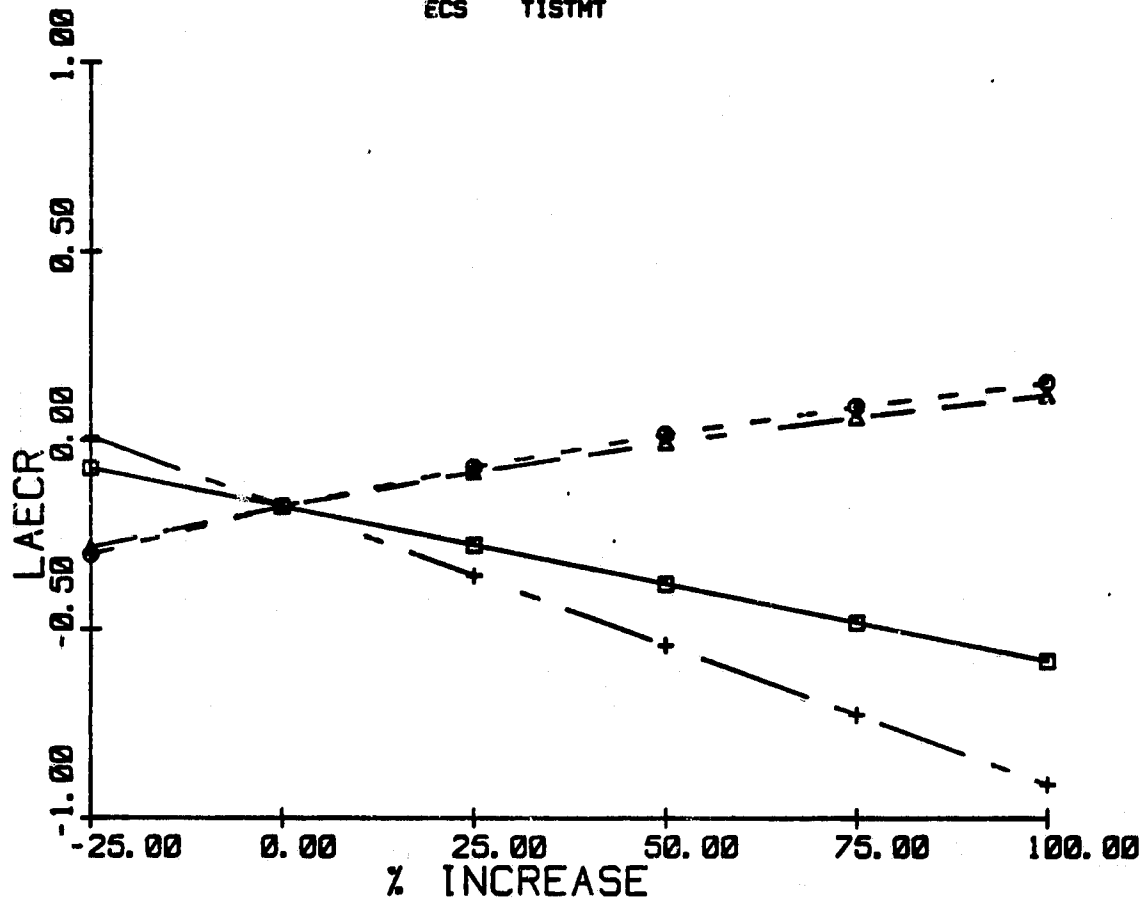
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26214

ECS TISTMT



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 20		CAPITAL COST- 73.7
PROCESS HEAT- 610	CAPITAL COST- 48.7	LAEC - 26.306
(BTU*10**6)	LAEC - 24.075	ROI - 0
WASTE FUEL- 250	FUEL - COAL-FGD	MW(GEN) - 20
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 0.182		

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

C-4

GENERAL ELECTRIC COMPANY

DATE 04/10/70

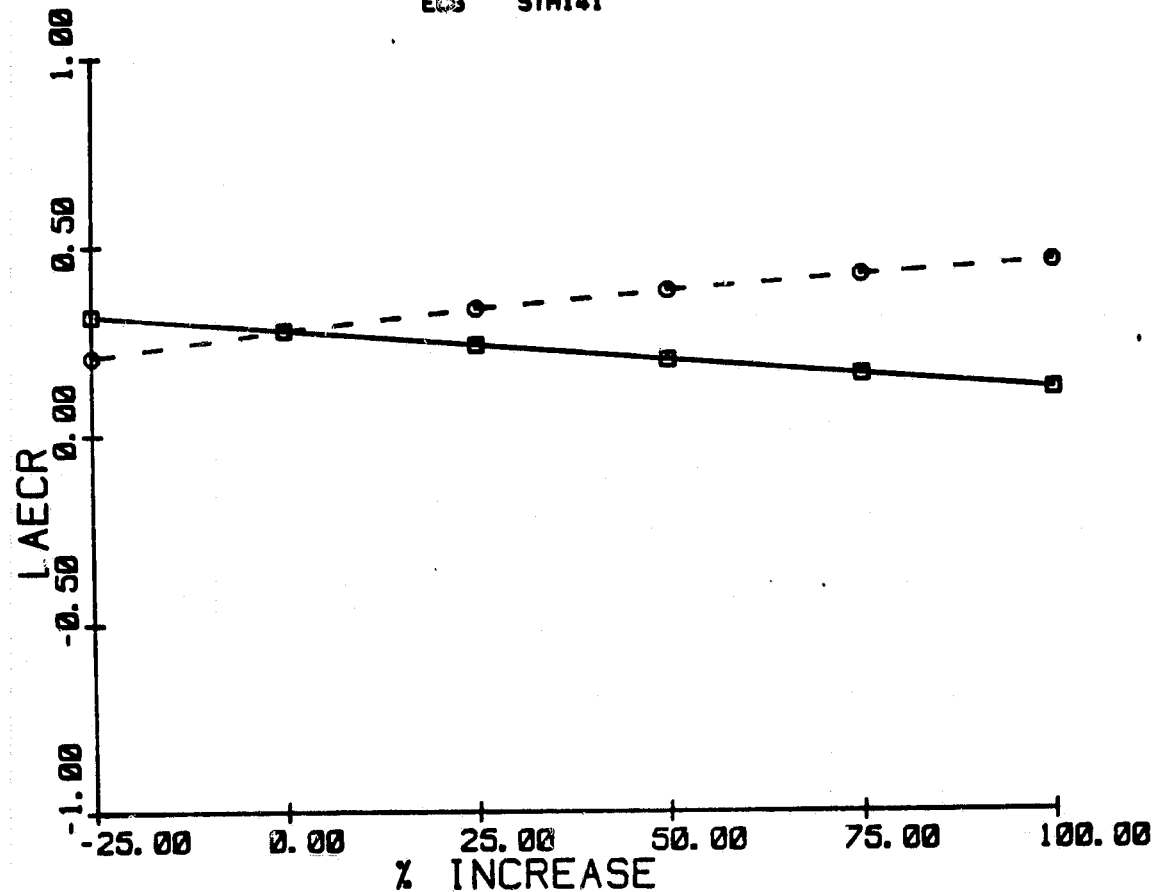
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20210

ECS STM141



BASE CASE NO COGENERATION

PROCESS
MW- 20
PROCESS HEAT- 307
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.222

CAPITAL COST- 20.0
LAEC - 10.120
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.5
LAEC - 11.912
ROI - 0
MW(GEN) - 10
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/70

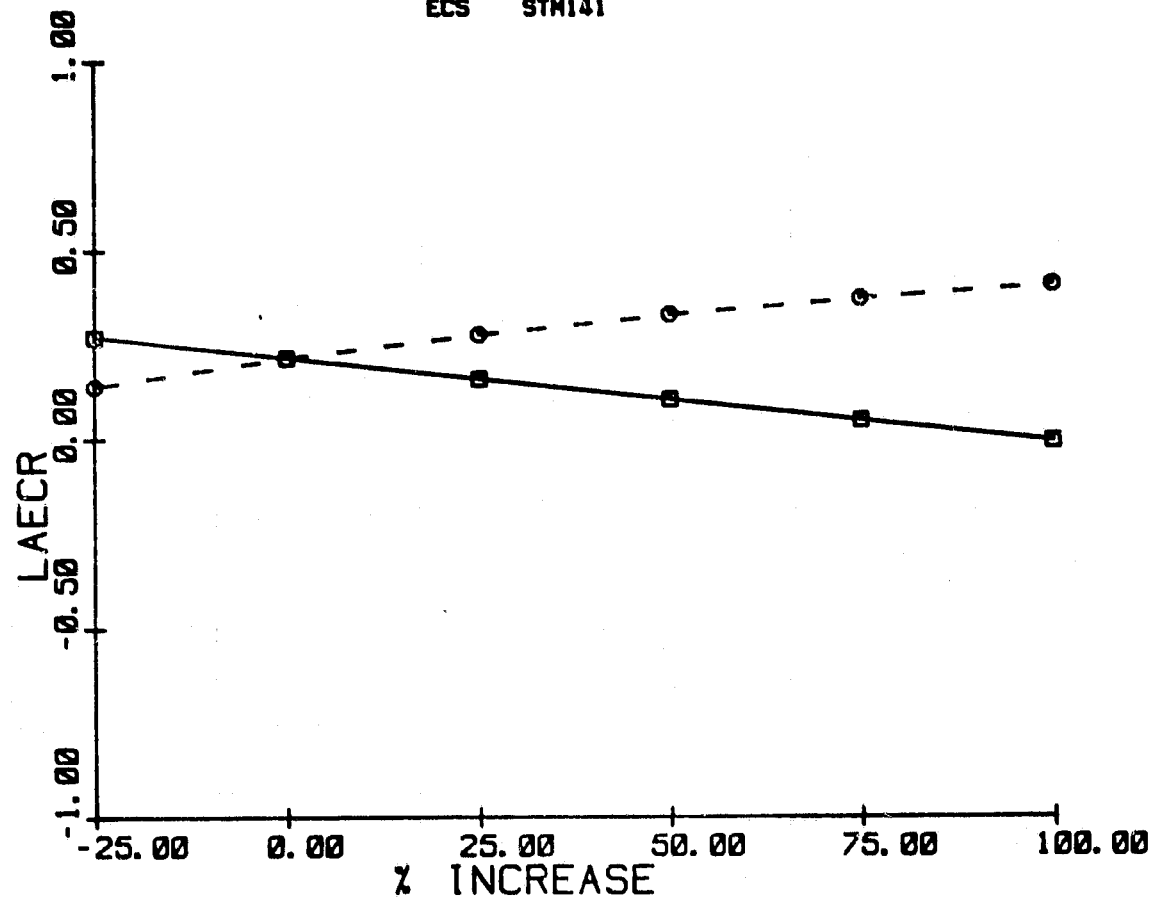
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 25210

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 20
PROCESS HEAT- 307
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.222

CAPITAL COST- 20.0
LAEC - 10.420
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 27.1
LAEC - 12.004
ROI - 0
MW(GEN) - 10
FUEL - COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

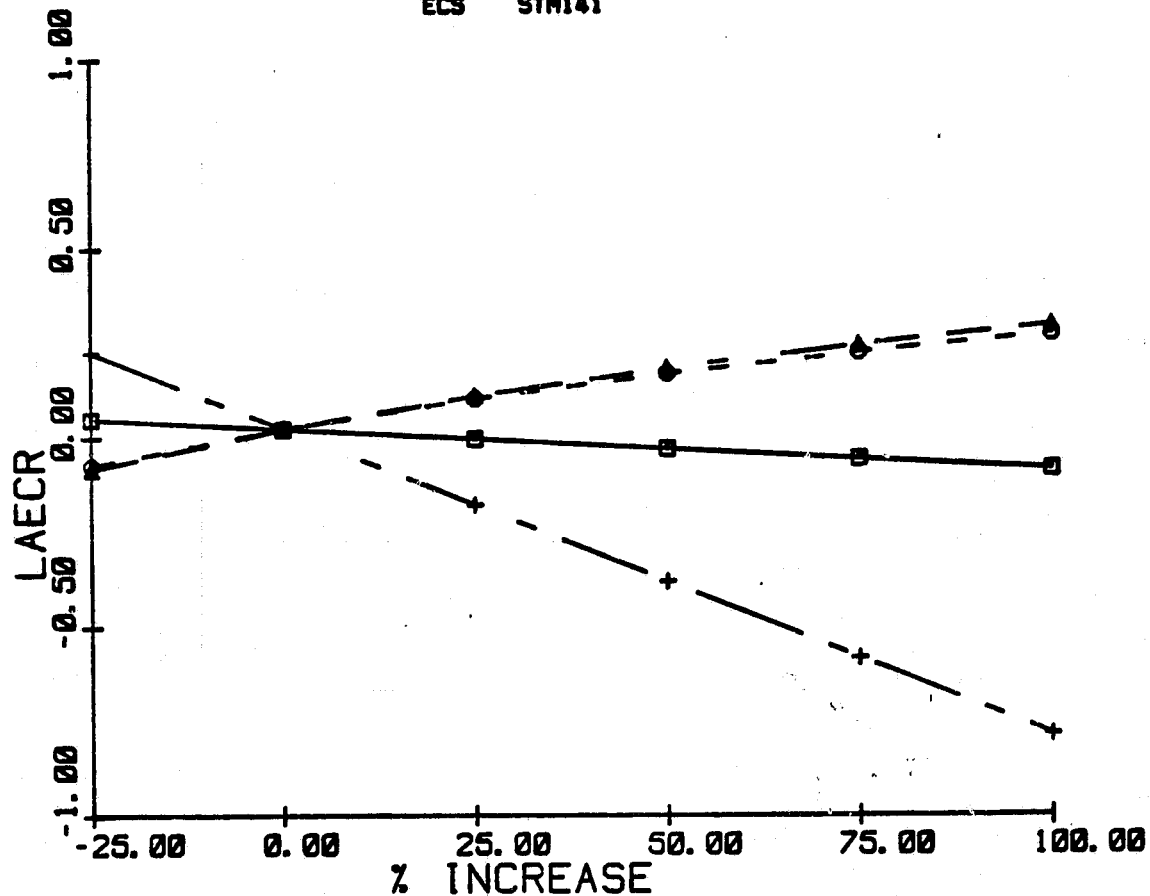
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20210

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 20

PROCESS HEAT- 307

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.222

CAPITAL COST- 20.0

LAEC - 10.420

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 13.1

LAEC - 10.000

ROI - 0

MW(GEN) - 10

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

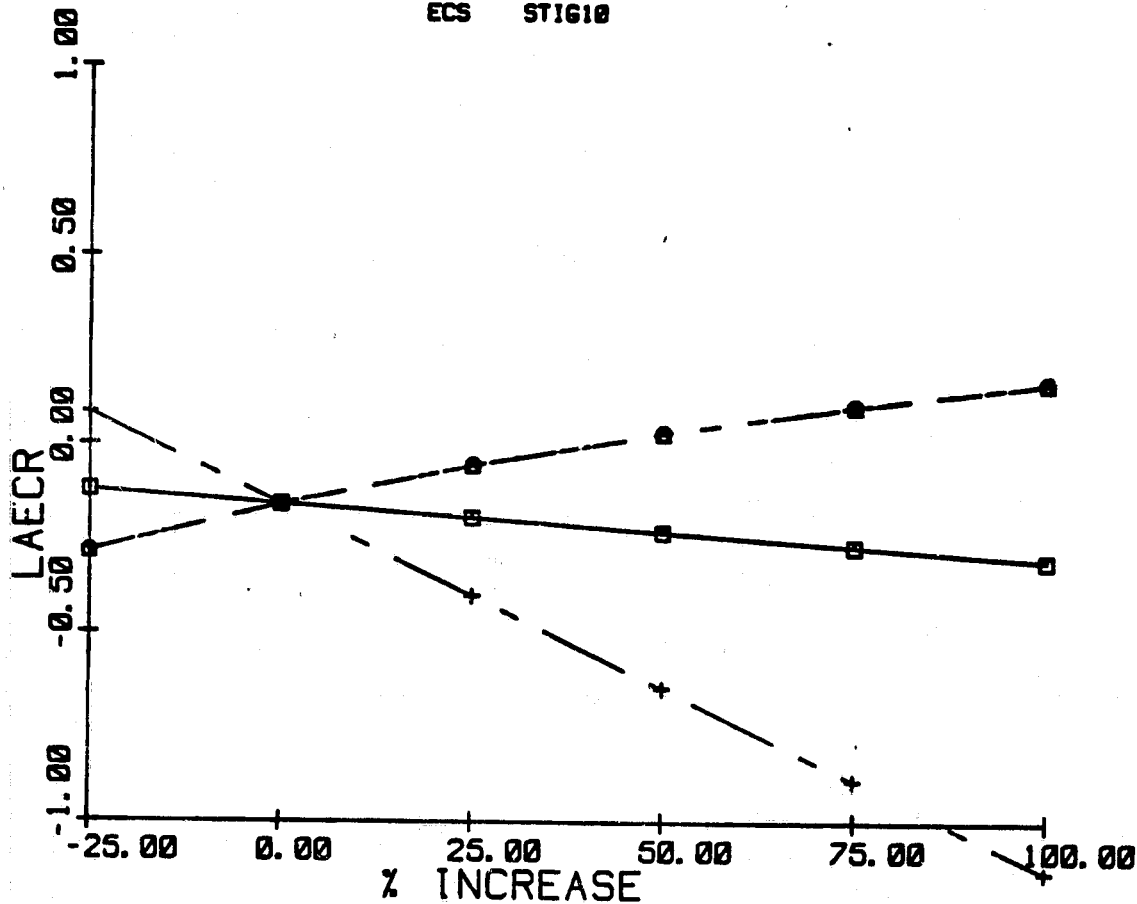
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20210

ECS ST1610



BASE CASE

NO COGENERATION

PROCESS
MW- 20
PROCESS HEAT- 307
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.222

CAPITAL COST- 20.0
LAEC - 10.420
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.4
LAEC - 10.040
ROI - 0
MW(GEN) - 20
FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

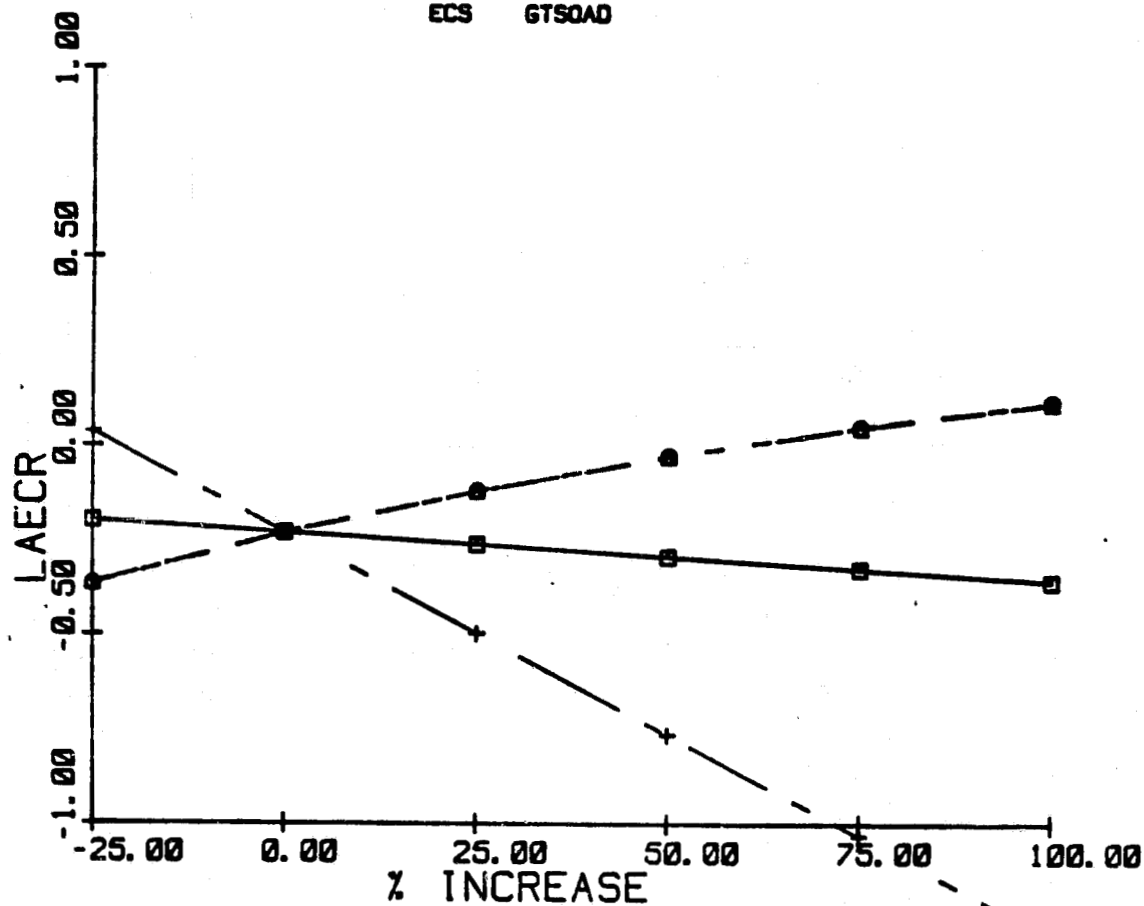
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20210

ECS GTSQAD



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 20
PROCESS HEAT- 307
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.222

CAPITAL COST- 20.8
LAEC - 10.420
FUEL - COAL-FGD

CAPITAL COST- 10.1
LAEC - 20.215
ROI - 0
MW(GEN) - 20
FUEL - DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

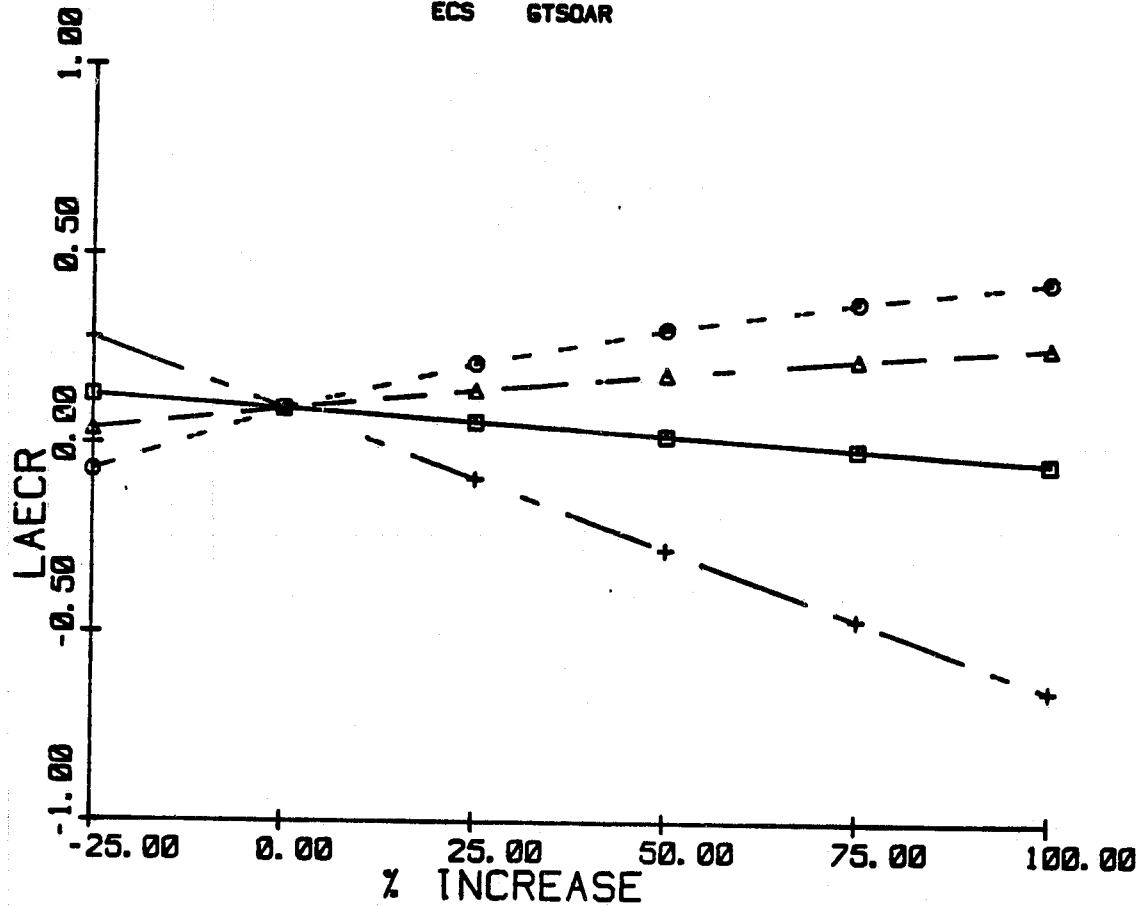
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26217

ECS GTSOAR



BASE CASE

NO COGENERATION

PROCESS
MW- 31
PROCESS HEAT- 183
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.584

CAPITAL COST- 14.8
LAEC - 16.517
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 17.5
LAEC - 14.987
ROI - 8
MW(GEN) - 31
FUEL - RESIDUAL

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 △ — — — △ NO-CGN FUEL
 + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

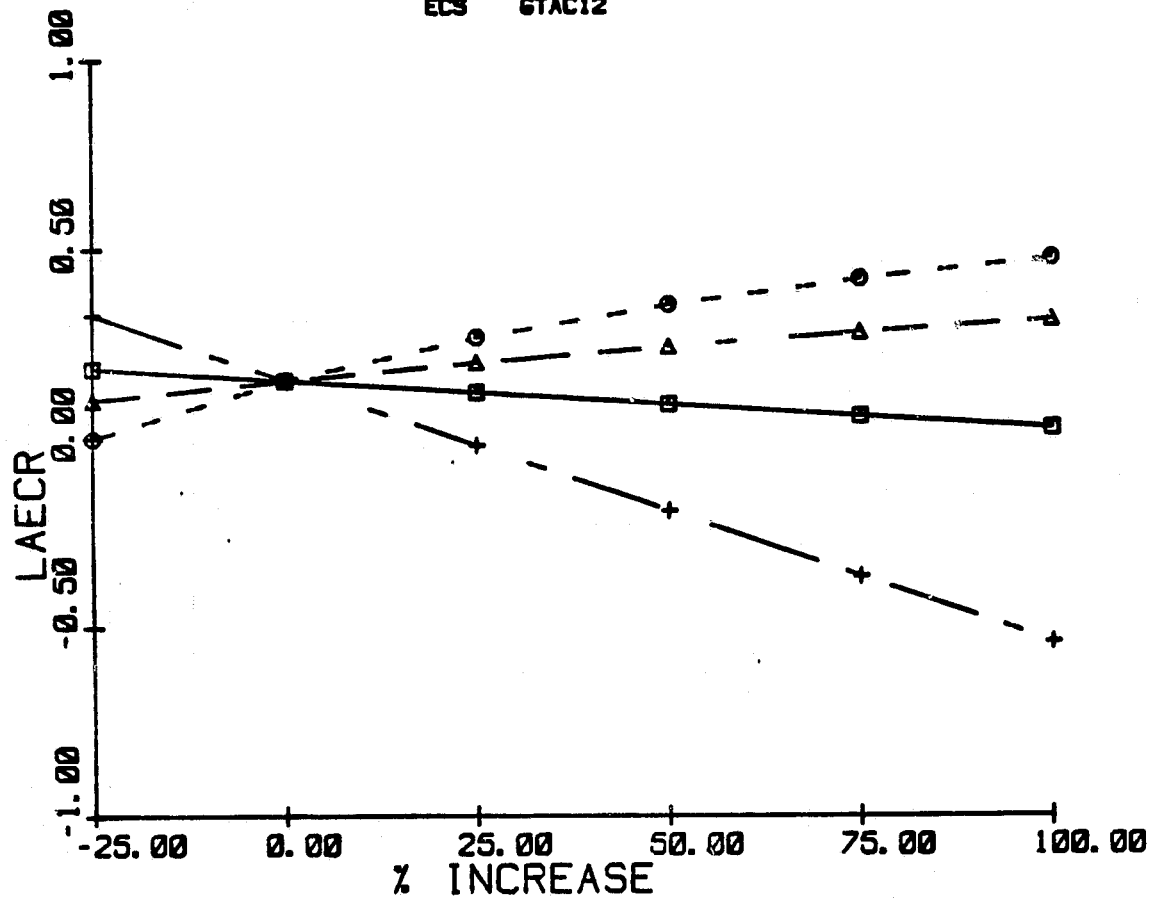
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20217

ECS 6TAC12



BASE CASE

NO COGENERATION

PROCESS
MW- 31
PROCESS HEAT- 103
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.584

CAPITAL COST- 14.8
LAEC - 10.517
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.1
LAEC - 14.007
ROI - 0
MW(GEN) - 31
FUEL - RESIDUAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
—△— NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/10/79

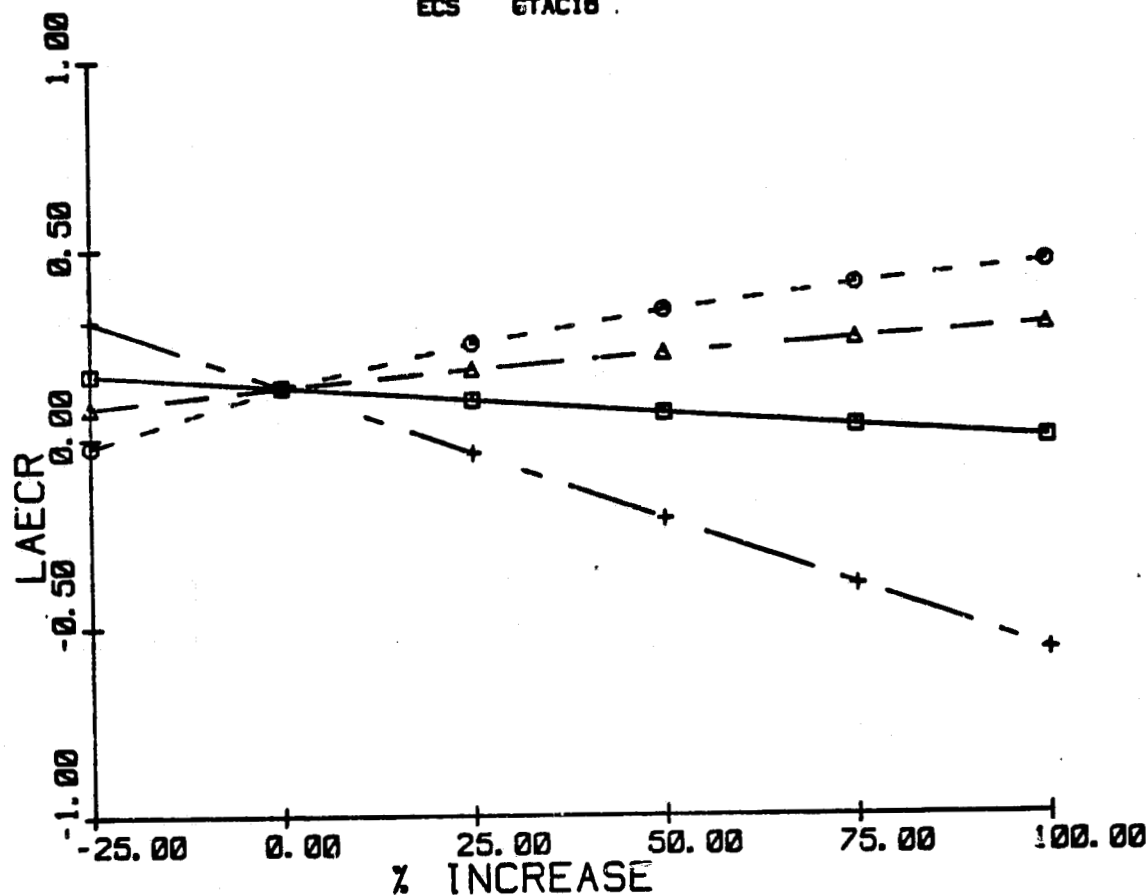
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28217

ECS GTAC18



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 183

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.584

CAPITAL COST- 14.8

LAEC - 18.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 17.4

LAEC - 14.382

ROI - 0

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

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GENERAL ELECTRIC COMPANY

DATE 04/10/79

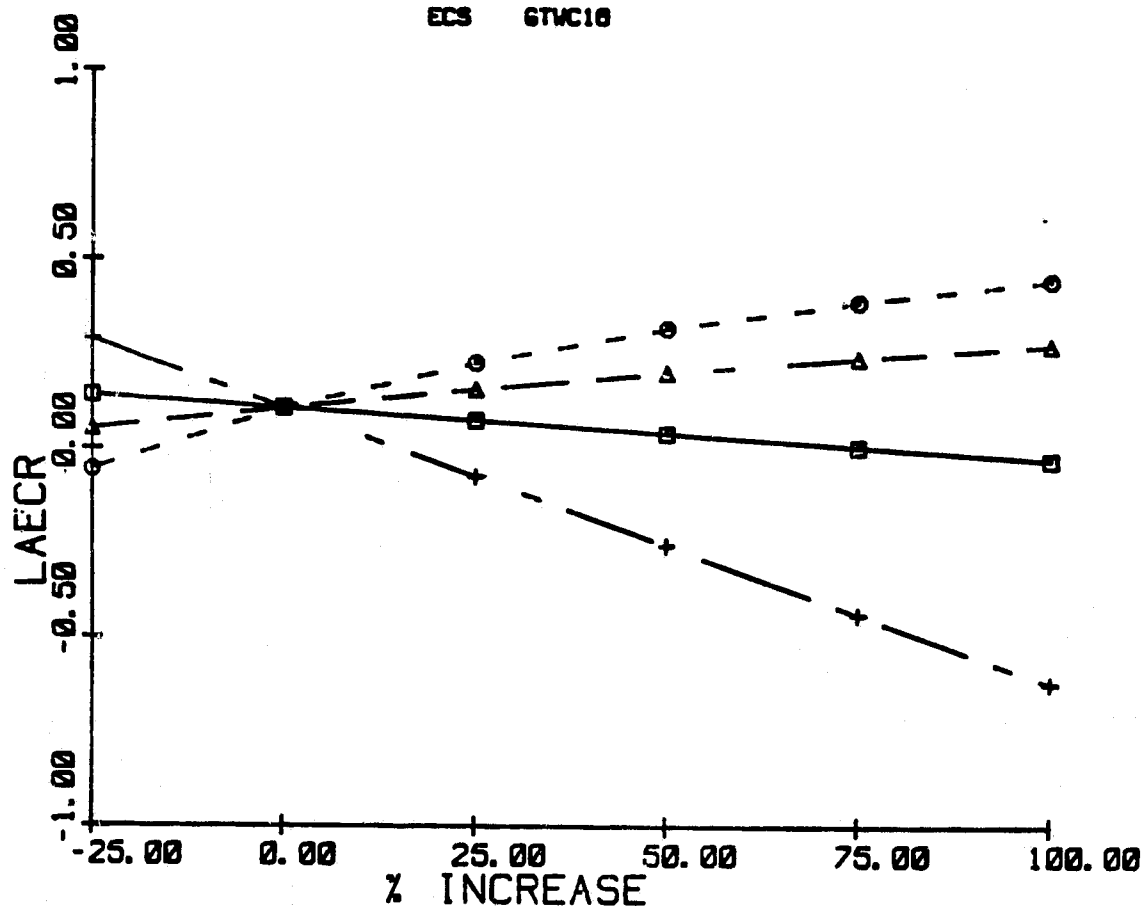
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26217

ECS GTWC10



BASE CASE

PROCESS

MW- 31

PROCESS HEAT- 163

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.504

NO COGENERATION

CAPITAL COST- 14.8

LAEC - 16.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 17.2

LAEC - 14.761

ROI - 0

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

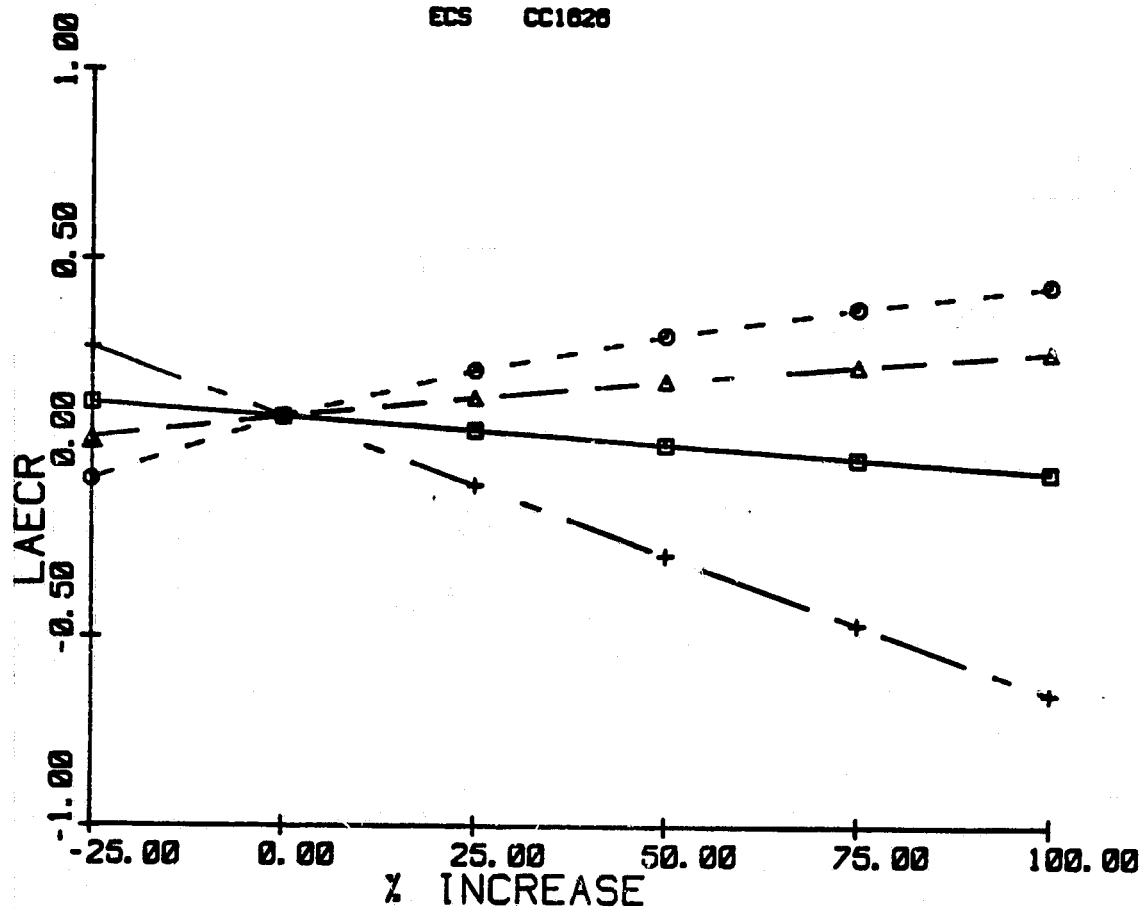
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26217

ECS CC1626



BASE CASE

NO COGENERATION

PROCESS
MW- 31
PROCESS HEAT- 183
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.584

CAPITAL COST- 14.8
LAEC - 18.517
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 18.1
LAEC - 15.150
ROI - 0
MW(GEN) - 31
FUEL - RESIDUAL

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 △ — — — △ NO-CGN FUEL
 + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

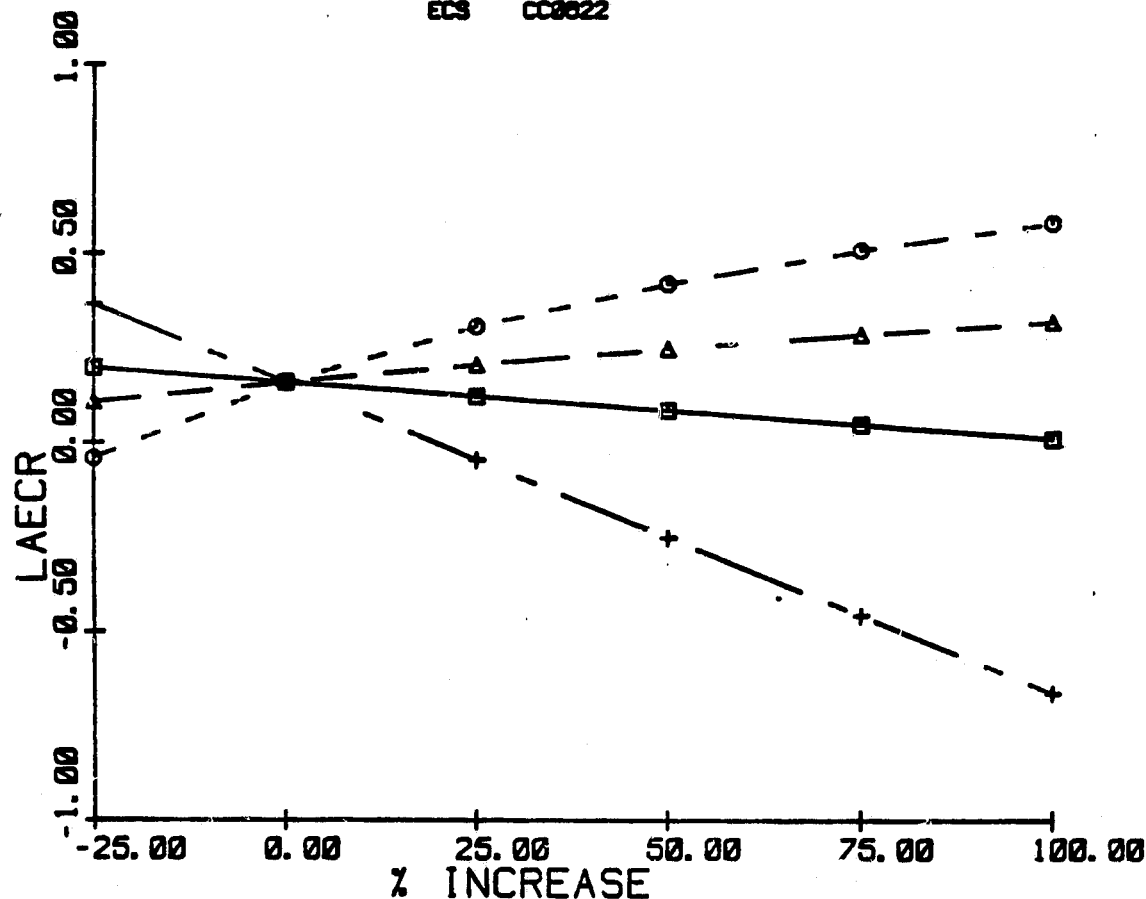
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28217

ECS CC8822



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 103

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.584

CAPITAL COST- 14.0

LAEC - 10.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.7

LAEC - 13.094

ROI - 0

MW(GEN) - 45

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

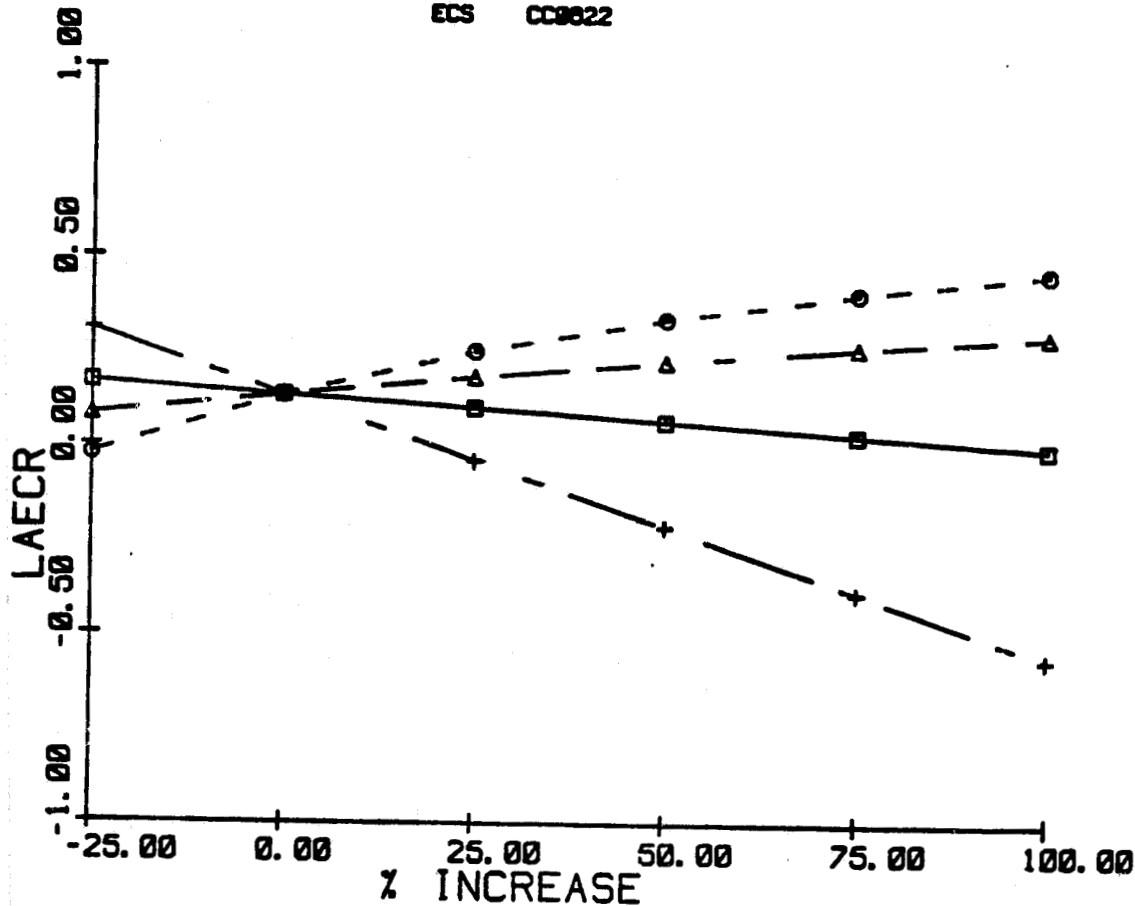
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28217

ECS CC8622



BASE CASE

NO COGENERATION

PROCESS

MM- 31

PROCESS HEAT- 183

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.584

CAPITAL COST- 14.8

LAEC - 18.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 18.9

LAEC - 14.328

ROI - 0

MM(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/70

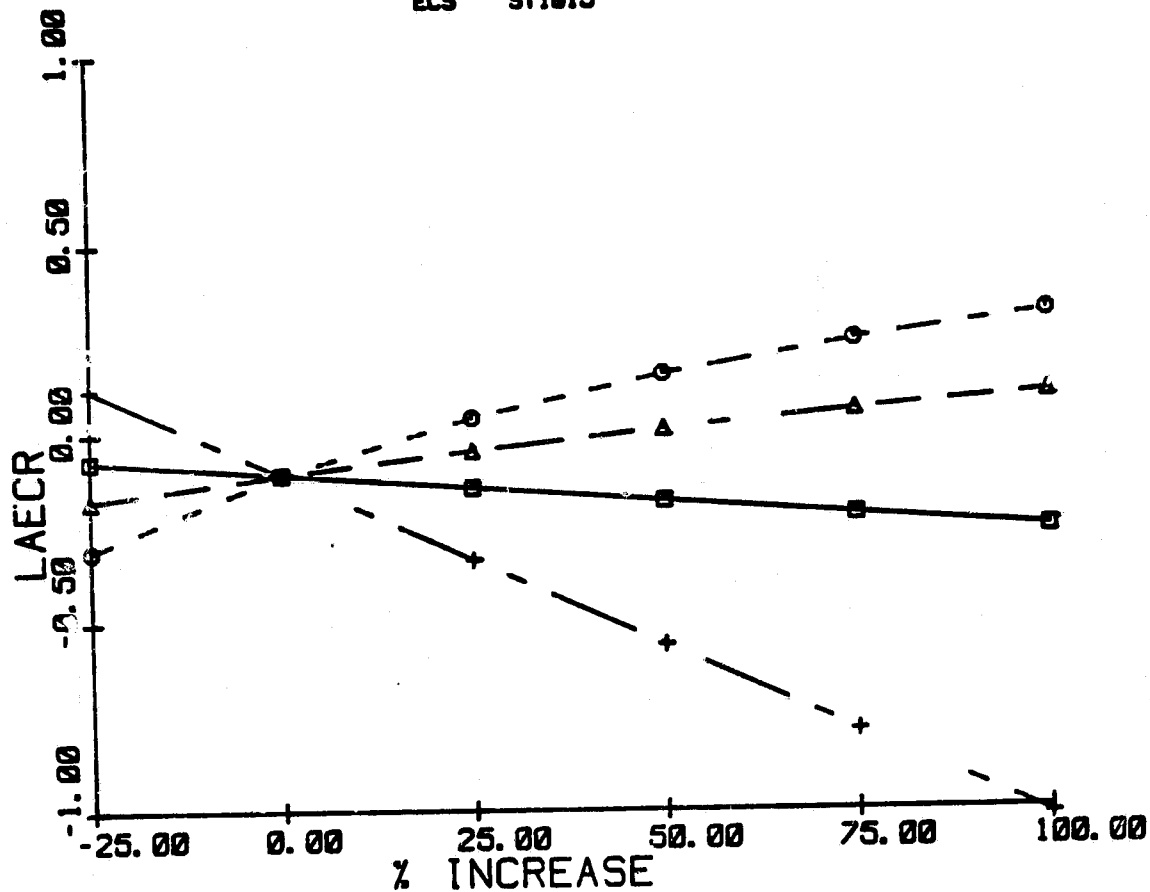
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28217

ECS STIG15



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 183

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.534

CAPITAL COST- 14.8

LAEC - 18.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 18.8

LAEC - 18.311

ROI - 0

MW(GEN) - 31

FUEL - RESIDUAL

- CAPITAL COST
- - -○- ELECTRIC POWER
- ▲— NO-CGN FUEL
- - -+ - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

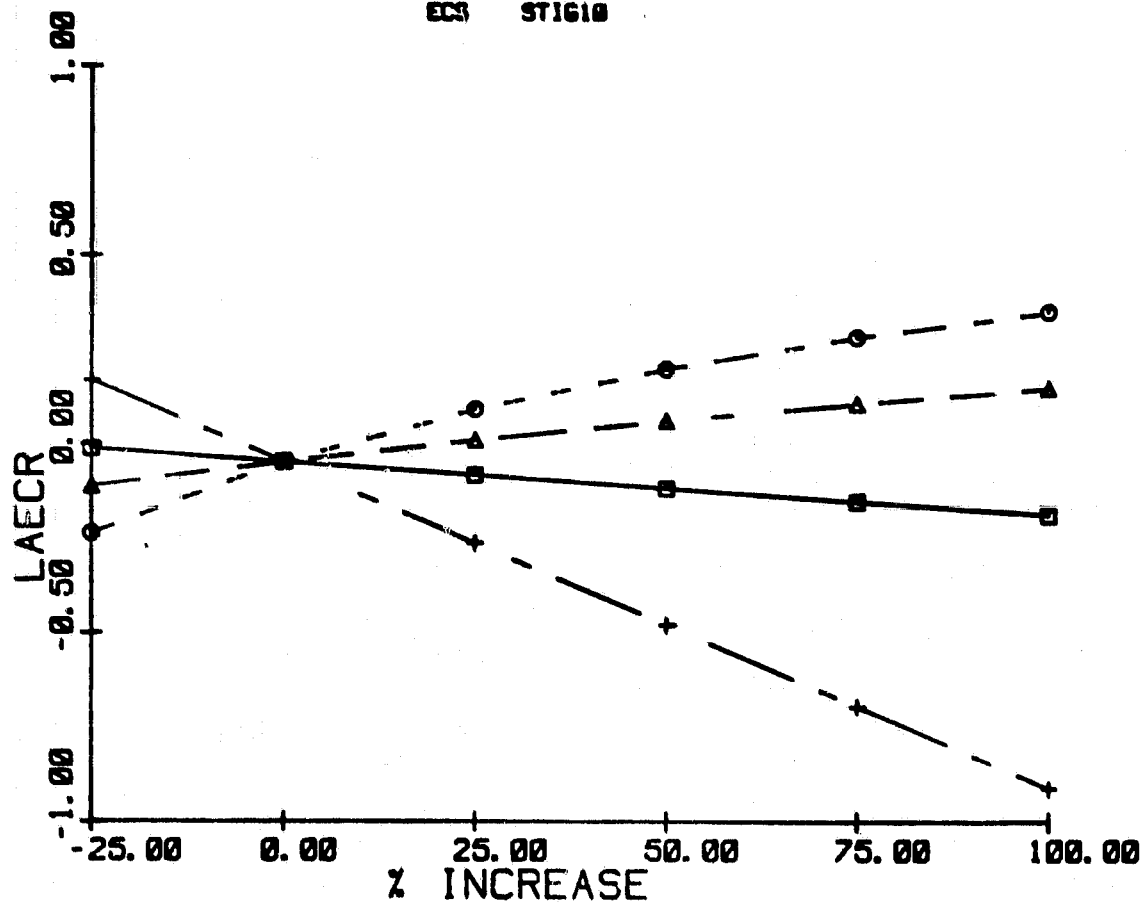
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 26217

ECS ST1618



BASE CASE

PROCESS

MW- 31
PROCESS HEAT- 103
(BTU*10**6)

WASTE FUEL- 0
(BTU*10**6)

POWER/HEAT- 0.504

NO COGENERATION

CAPITAL COST- 14.0

LAEC - 16.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 17.7

LAEC - 17.305

ROI - 8

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

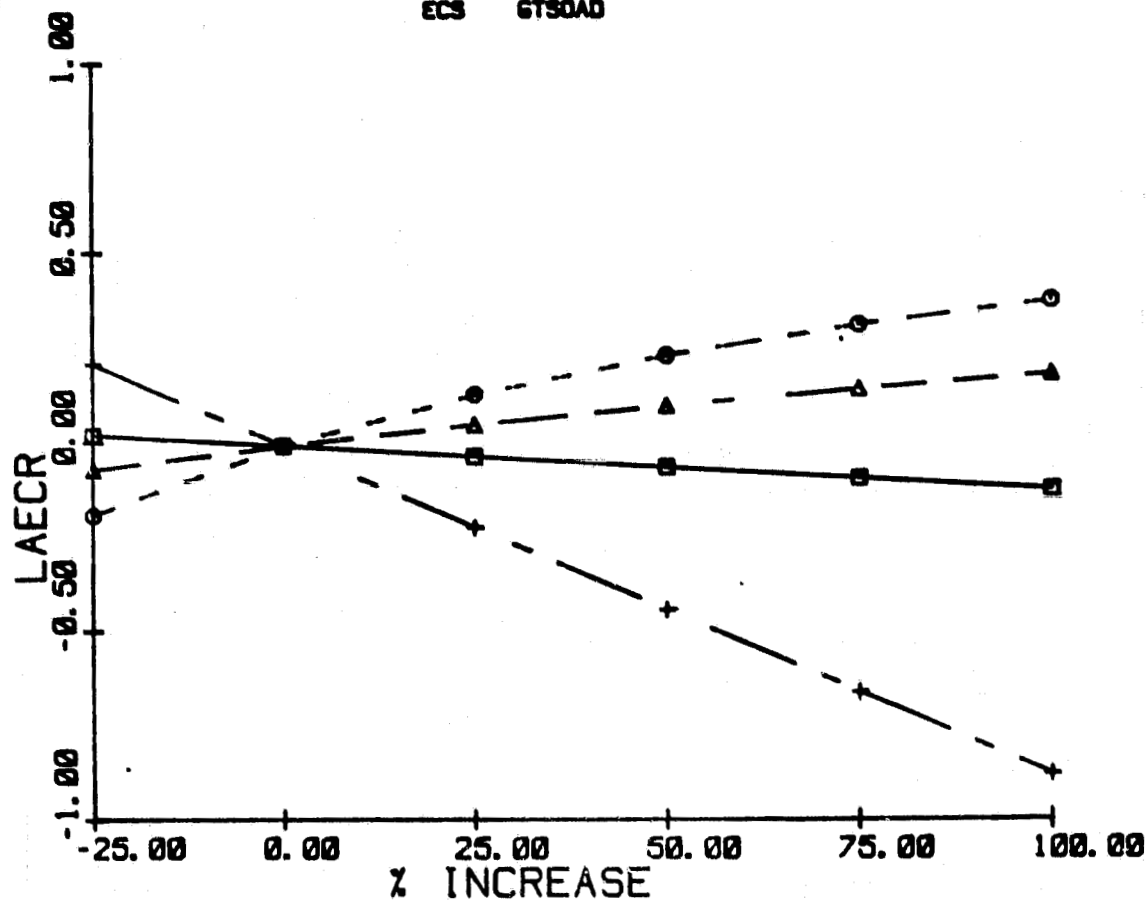
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20217

ECS 6T50AD



BASE CASE

NO COGENERATION

PROCESS
MW- 31
PROCESS HEAT- 103
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.504

CAPITAL COST- 14.0
LAEC - 10.517
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 14.7
LAEC - 10.700
ROI - 0
MW(GEN) - 31
FUEL - DISTILLA

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 △ — — — △ NO-CGN FUEL
 + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

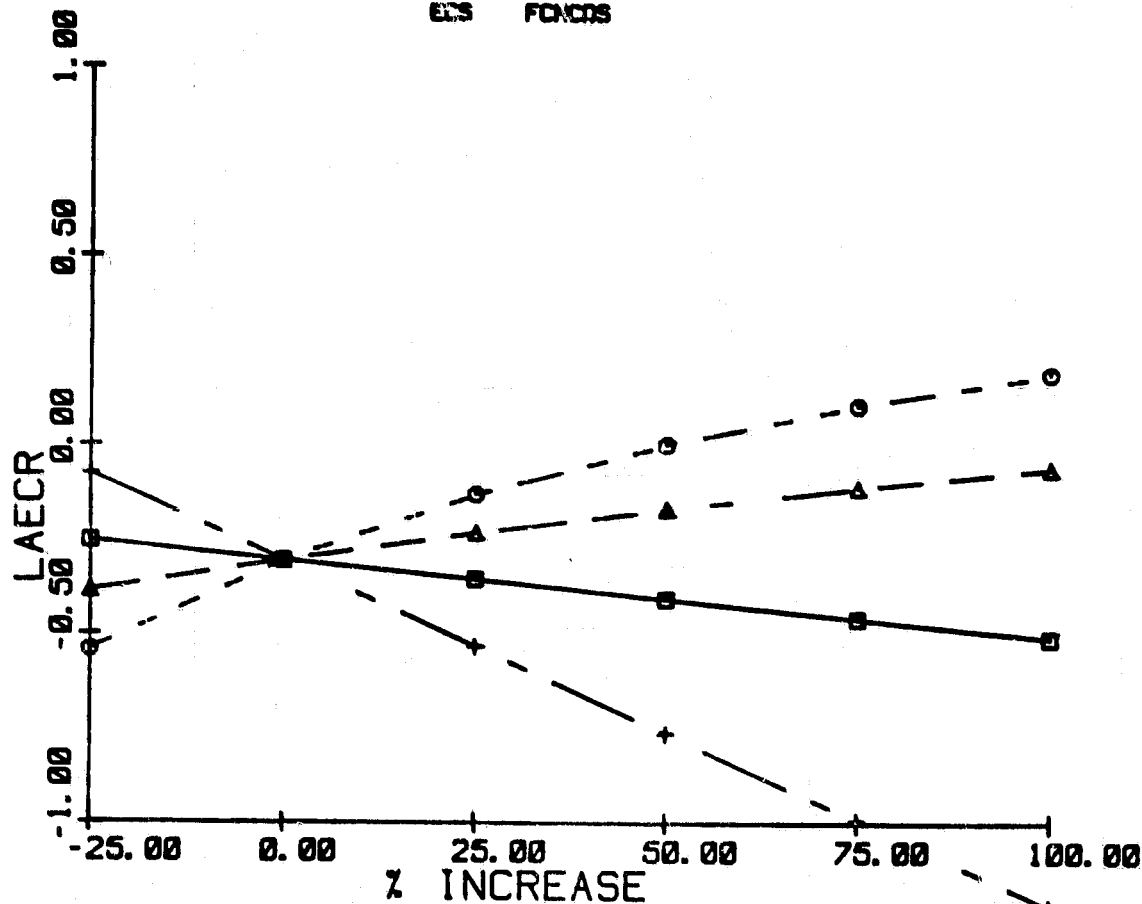
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20217

ECS FCMOS



BASE CASE

PROCESS

MW- 31

PROCESS HEAT- 103

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.504

NO COGENERATION

CAPITAL COST- 14.0

LAEC - 10.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 25.0

LAEC - 21.570

ROI - 0

MW(GEN) - 31

FUEL - DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

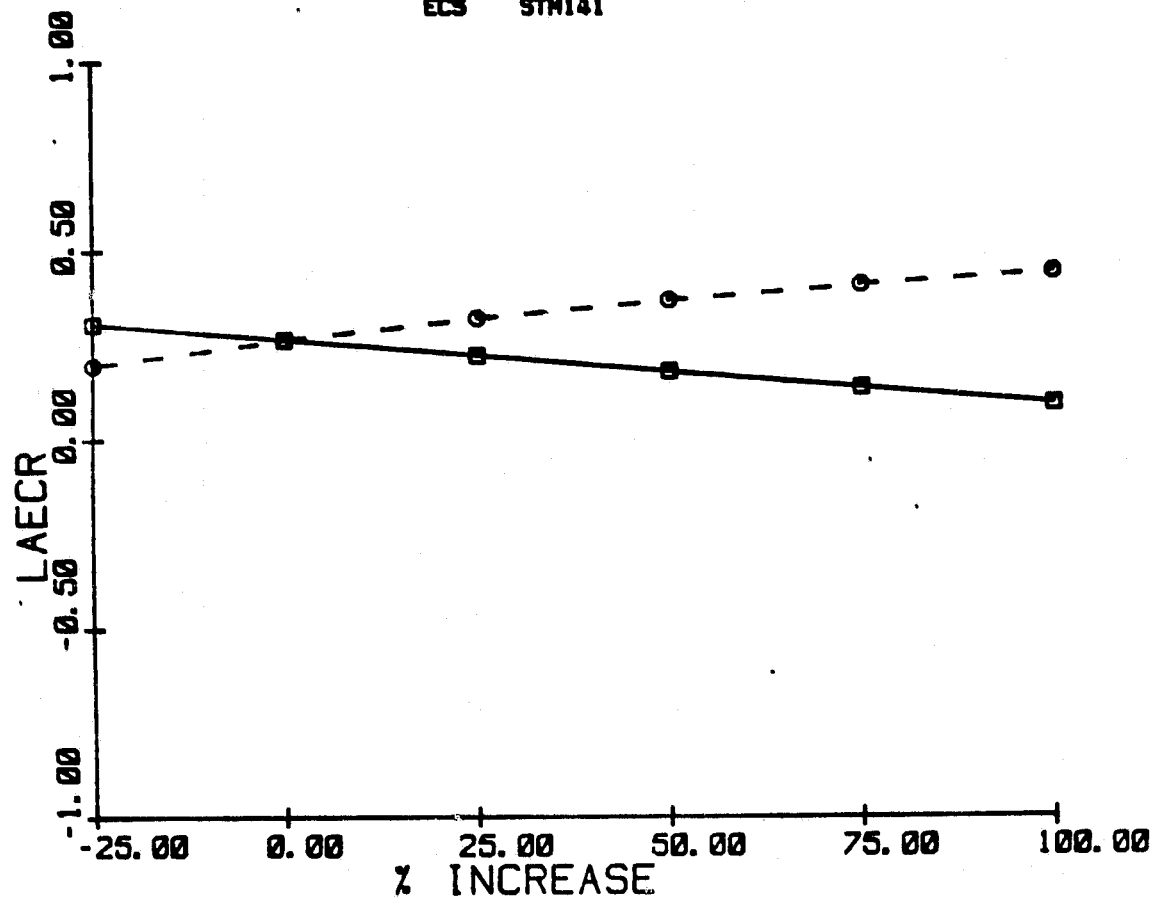
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28210

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 15

PROCESS HEAT- 244

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.210

CAPITAL COST- 17.9

LAEC - 13.020

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 16.8

LAEC - 9.504

ROI - 8

MW(GEN) - 14

FUEL - COAL-AFB

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

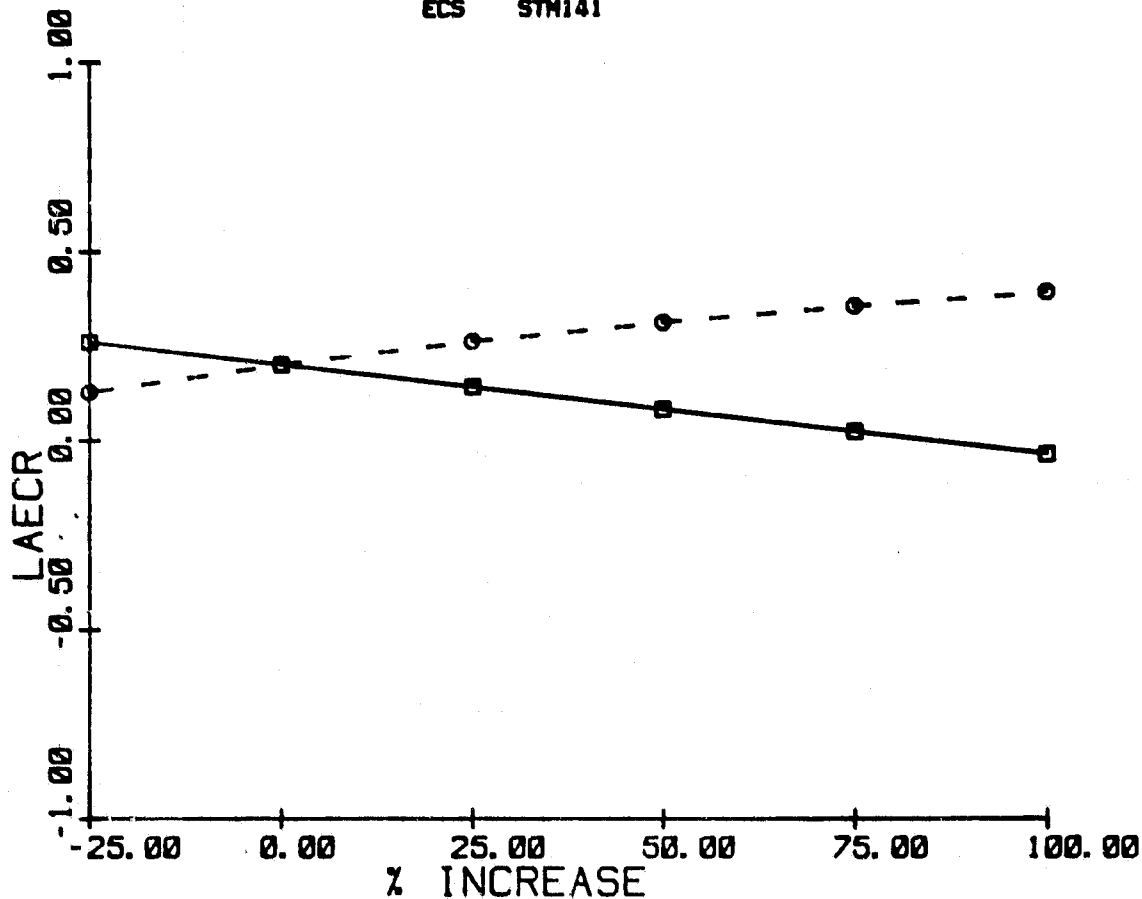
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20210

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 15
PROCESS HEAT- 244
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.210

CAPITAL COST- 17.9
LAEC- -13.020
FUEL- -COAL-FGD

COGENERATION

CAPITAL COST- 22.9
LAEC- -10.405
ROI- -8
MW(GEN)- 14
FUEL- -COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/78

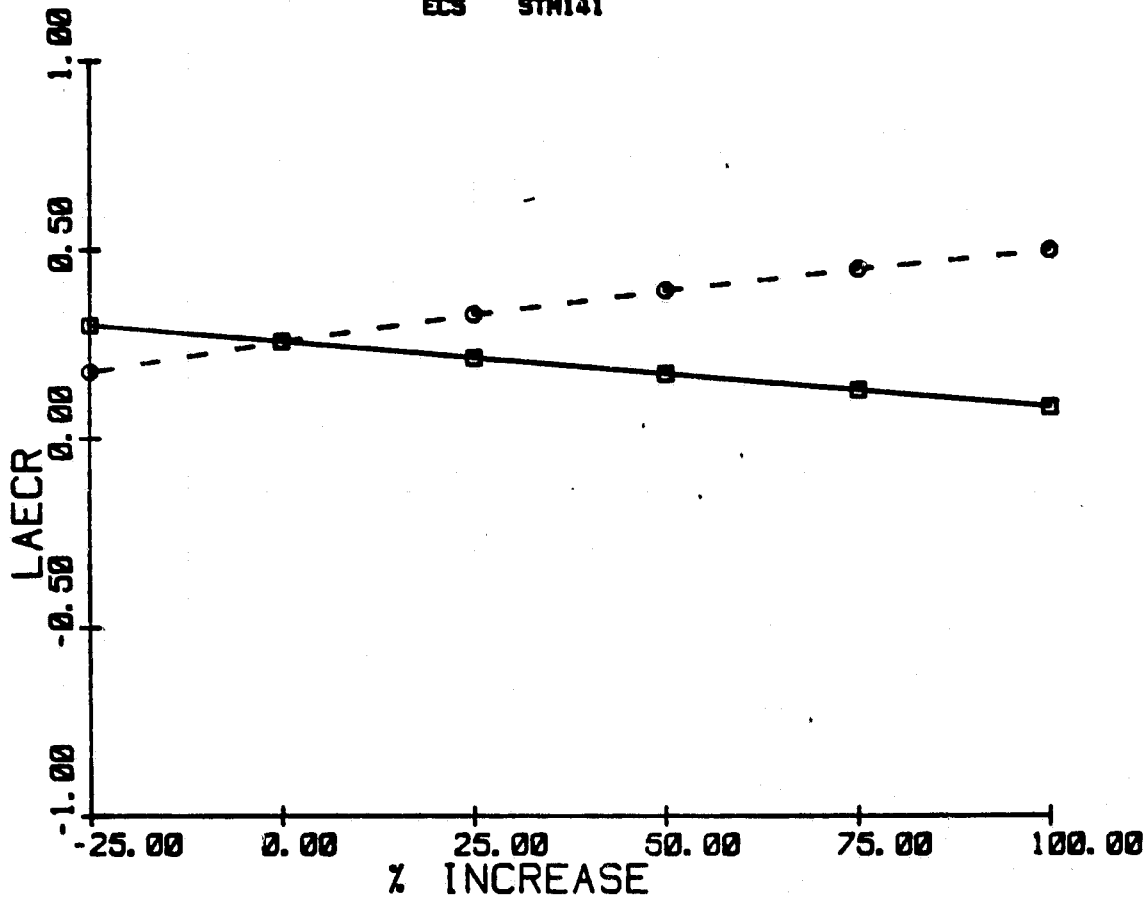
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20001

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 33

PROCESS HEAT- 1100

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.101

CAPITAL COST- 00.1

LAEC - 41.581

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 50.1

LAEC - 33.192

ROI - 0

MW(GEN) - 50

FUEL - COAL-AFB

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/70

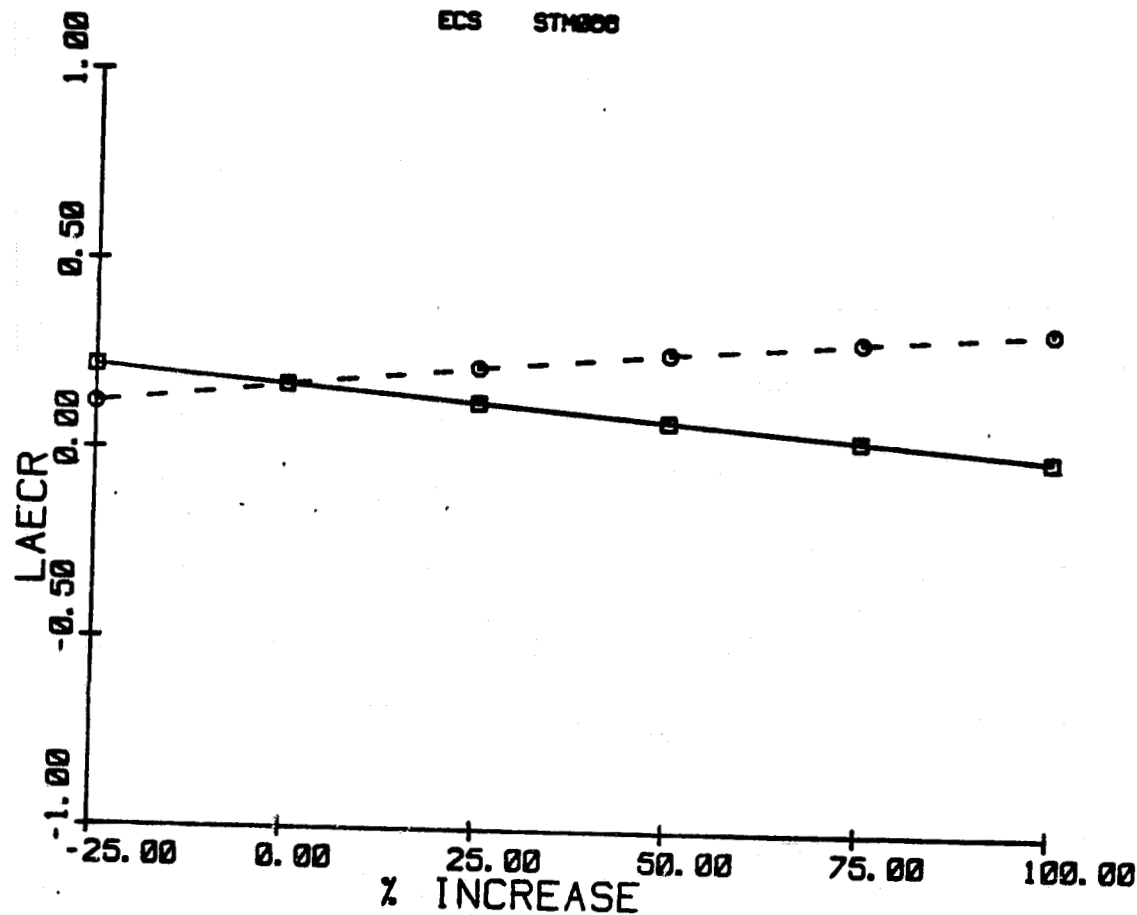
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20001

ECS STM008



BASE CASE

NO COGENERATION

PROCESS

MW- 33

PROCESS HEAT-1100

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.101

CAPITAL COST-60.1

LAEC -43.501

FUEL -COAL-FGD

COGENERATION

CAPITAL COST-58.9

LAEC -38.848

ROI -8

MW(GEN) -33

FUEL -COAL-AFB

———— □ CAPITAL COST
 - - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

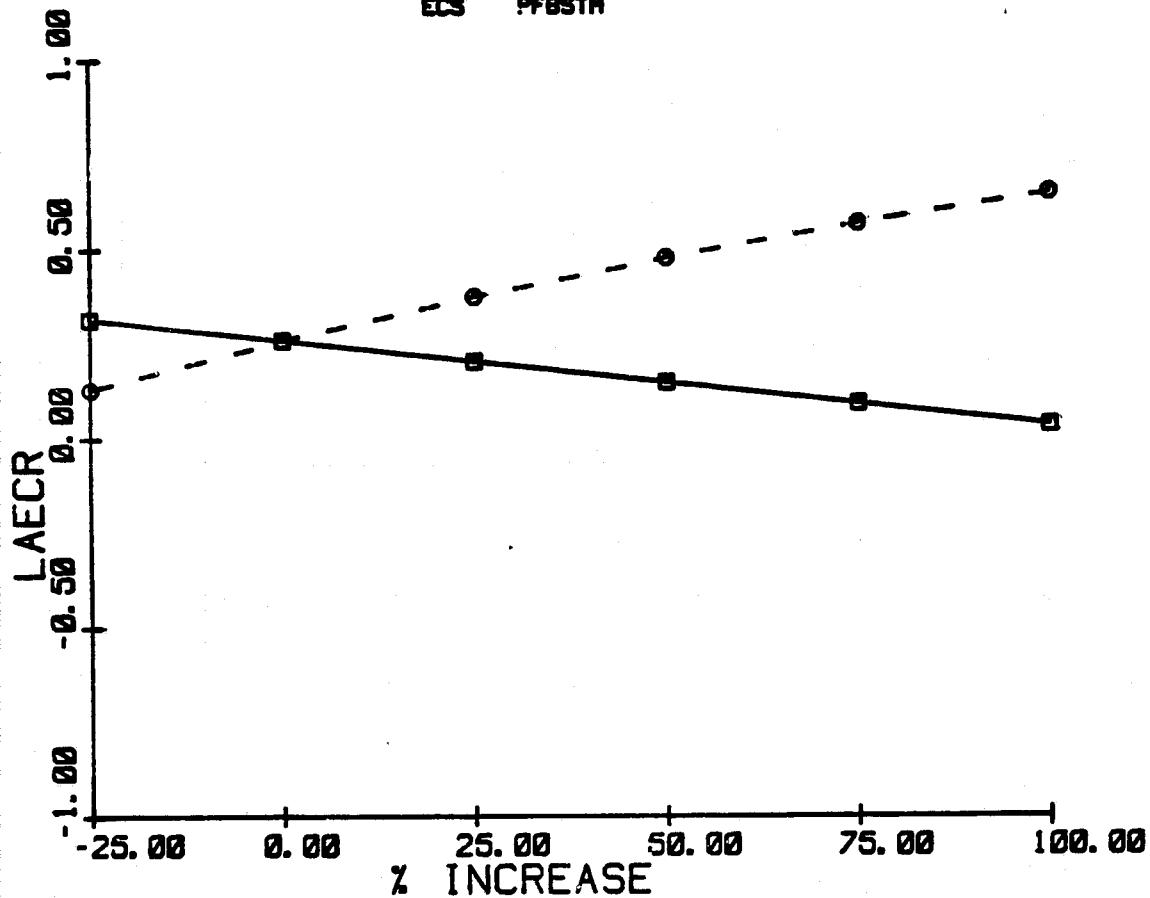
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20001

ECS PFBSTH



BASE CASE

NO COGENERATION

PROCESS
MW- 33
PROCESS HEAT- 1100
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.101

CAPITAL COST- 00.1

LAEC - 44.501

FUEL - COAL-FCO

COGENERATION

CAPITAL COST- 75.2

LAEC - 33.041

ROI - 0

MW(GEN) - 00

FUEL - COAL-PFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

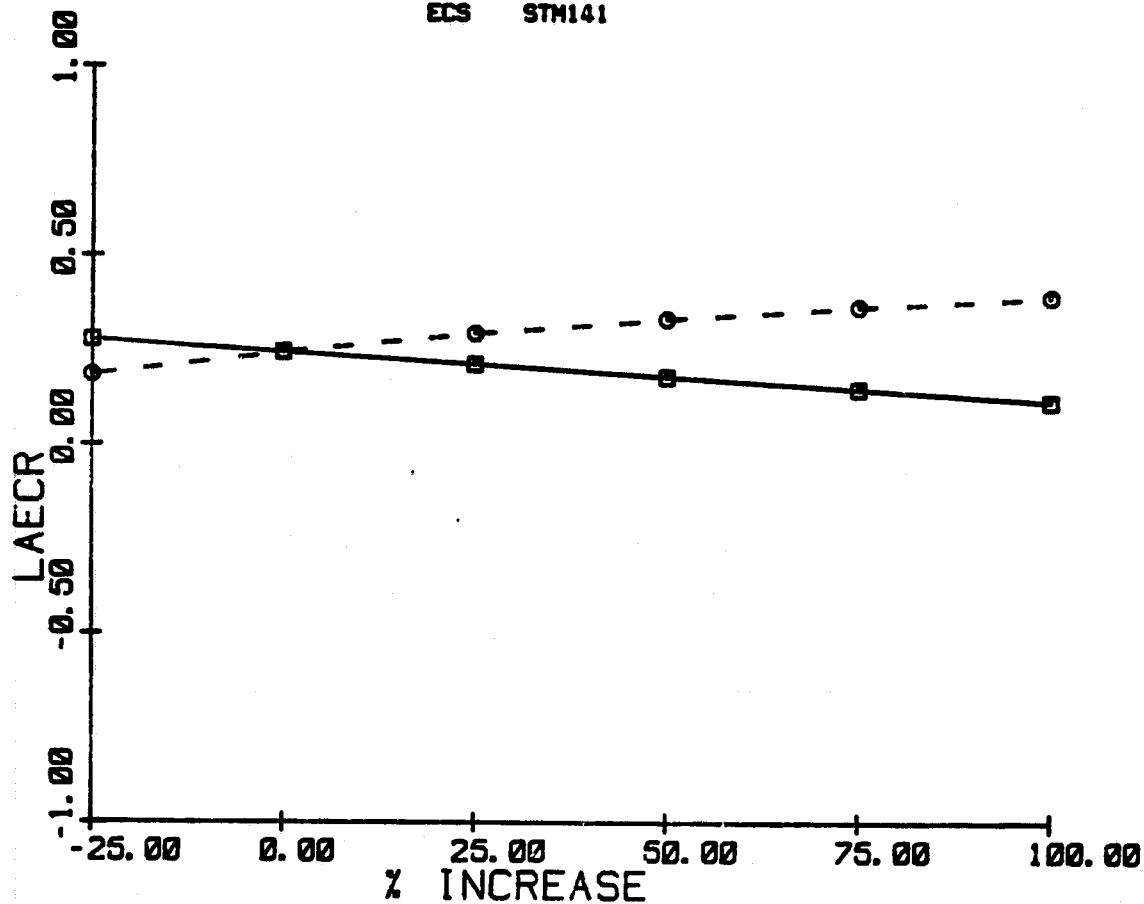
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20002

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 77
PROCESS HEAT- 1054
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.250

CAPITAL COST- 53.4
LAEC - 58.383
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 56.6
LAEC - 44.126
ROI - 8
MW(GEN) - 58
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

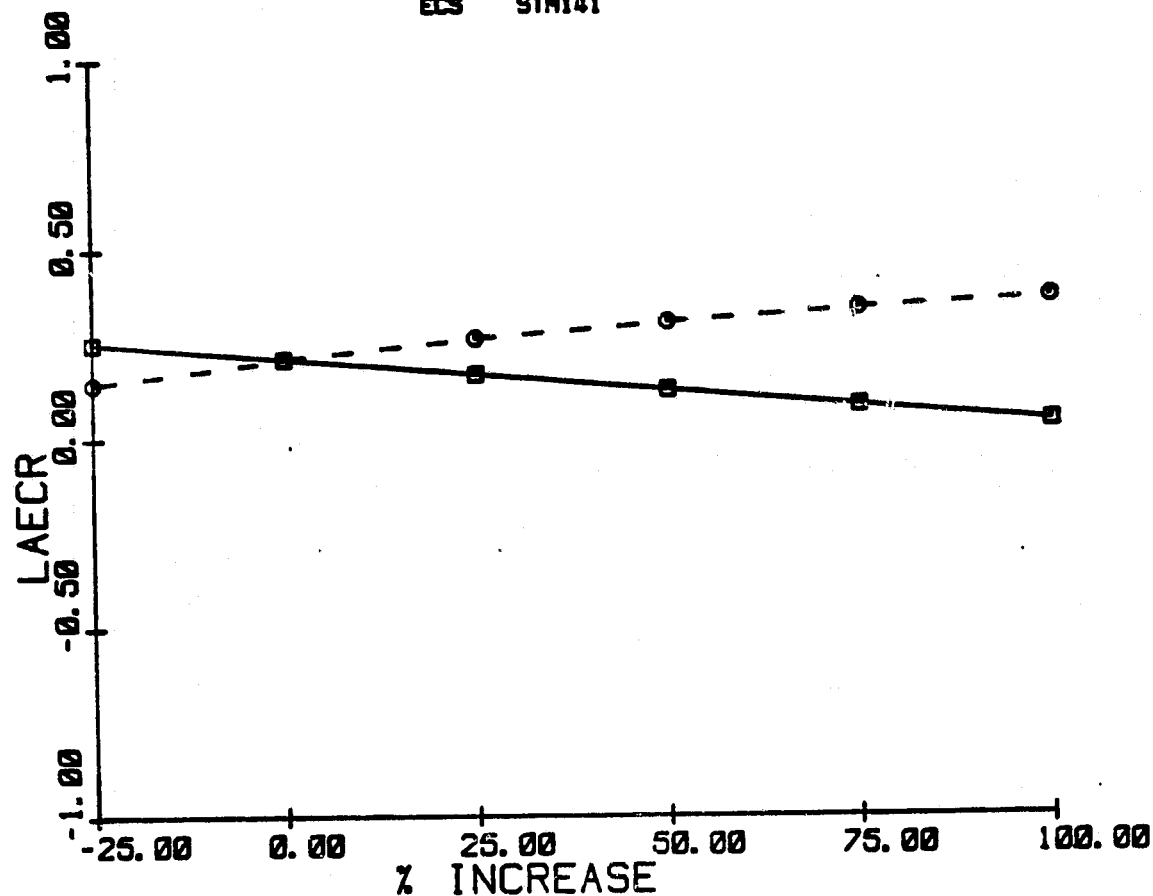
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20002

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 77
PROCESS HEAT- 1054
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.250

CAPITAL COST- 50.1
LAEC - 50.303
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 73.0
LAEC - 48.112
ROI - 0
MW(GEN) - 50
FUEL - COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

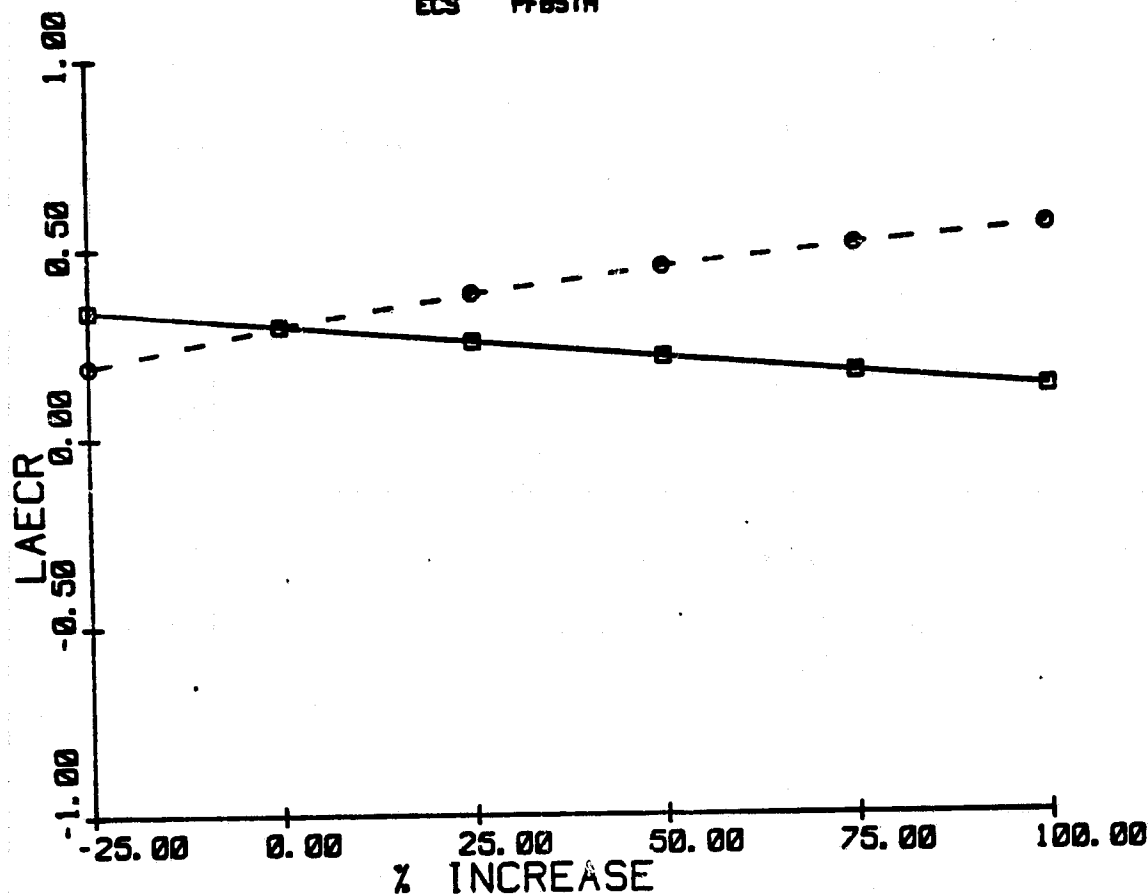
PAGE 146

COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20002

ECS PFBSTH



BASE CASE

NO COGENERATION

PROCESS

MW- 77

PROCESS HEAT- 1054

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.250

CAPITAL COST- 58.1

LAEC - 58.383

FUEL - COAL-FGO

COGENERATION

CAPITAL COST- 73.0

LAEC - 41.137

ROI - 0

MW(GEN) - 95

FUEL - COAL-PFB

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

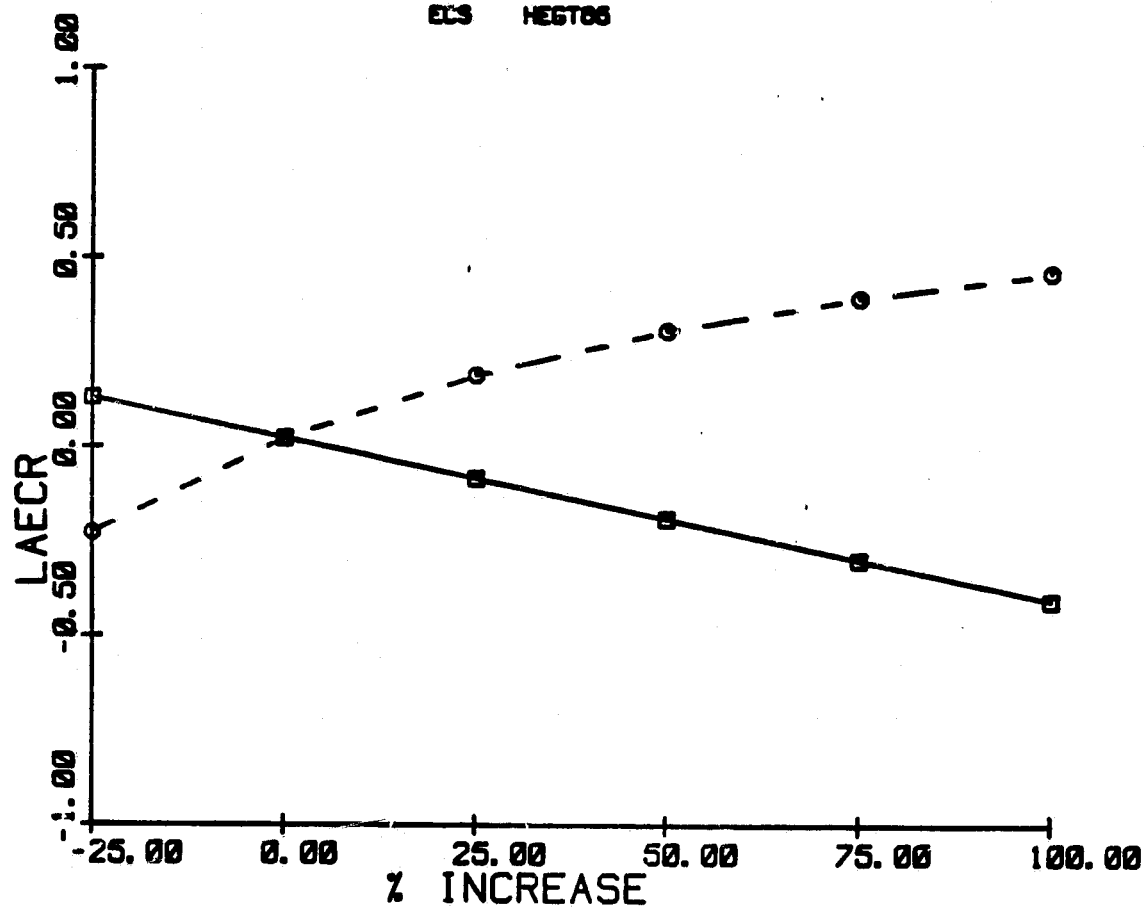
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28121

ECS HEGT06



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 120		CAPITAL COST- 154.0
PROCESS HEAT- 265	CAPITAL COST- 18.9	LAEC - 47.001
(BTU=10**6)	LAEC - 48.181	ROI - 0
WASTE FUEL- 0	FUEL - COAL-FGD	MW(GEN) - 120
(BTU=10**6)		FUEL - COAL-AFB
POWER/HEAT- 1.545		

—■—	CAPITAL COST
- - -○-	ELECTRIC POWER
	NO-CGN FUEL
	ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

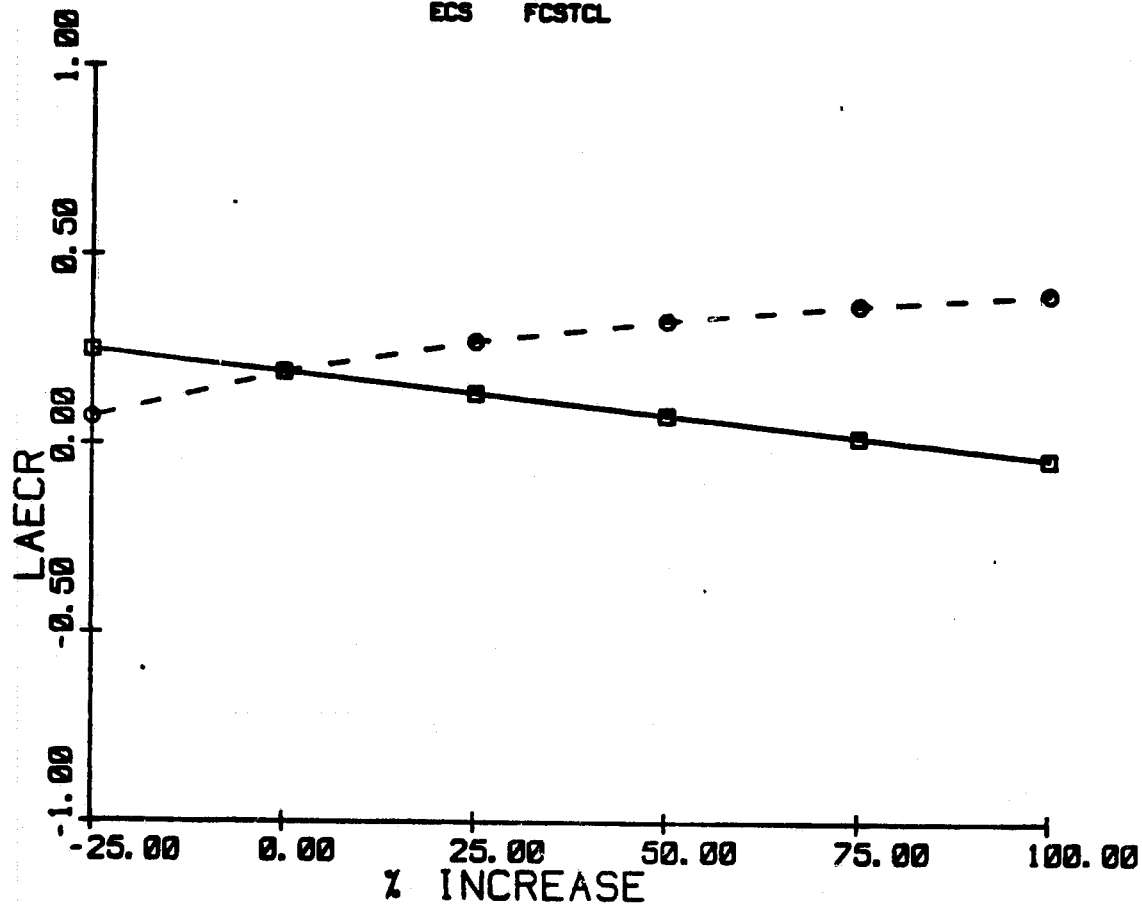
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS FCSTCL



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 205
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 10.9
LAEC - 40.101
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 00.2
LAEC - 30.945
ROI - 0
MW(GEN) - 70
FUEL - COAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

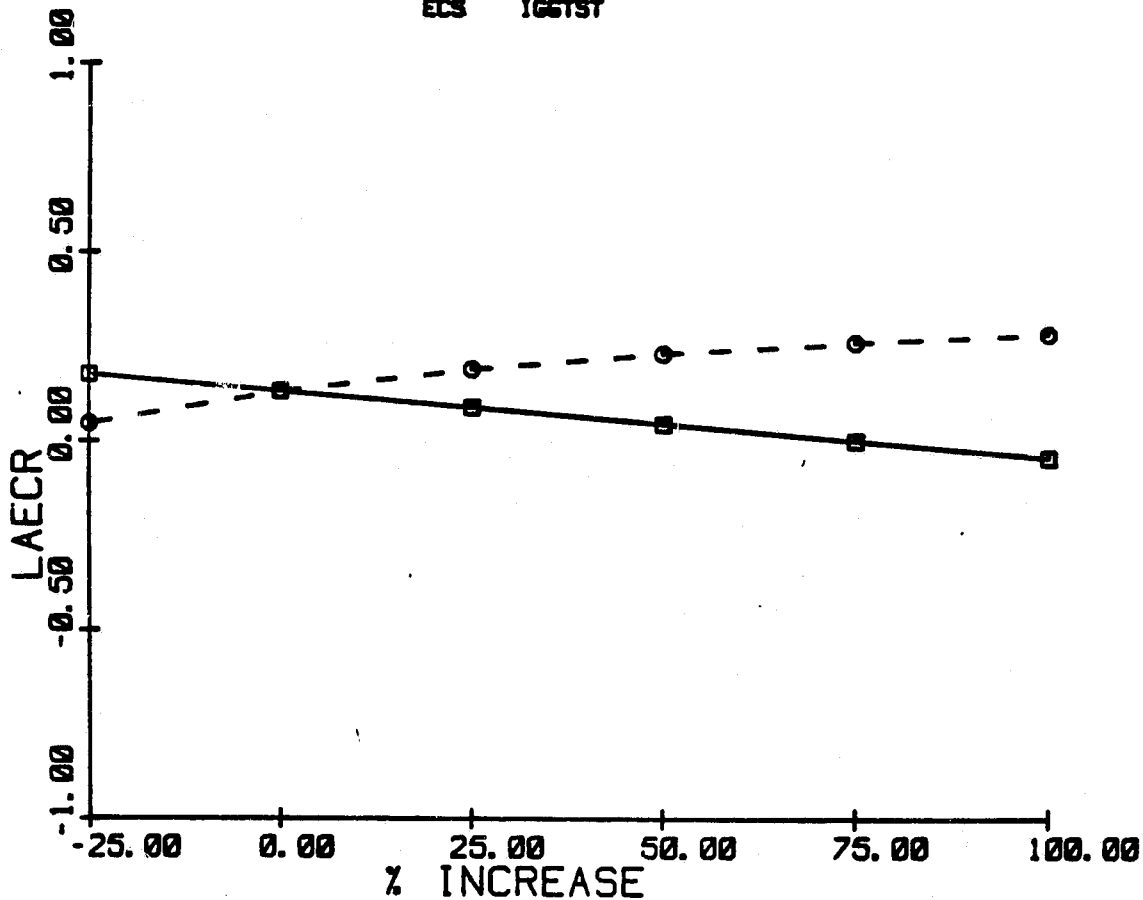
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28121

ECS IGGTST



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 205
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 18.9
LAEC - 48.101
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 62.8
LAEC - 41.708
ROI - 0
MW(GEN) - 50
FUEL - COAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

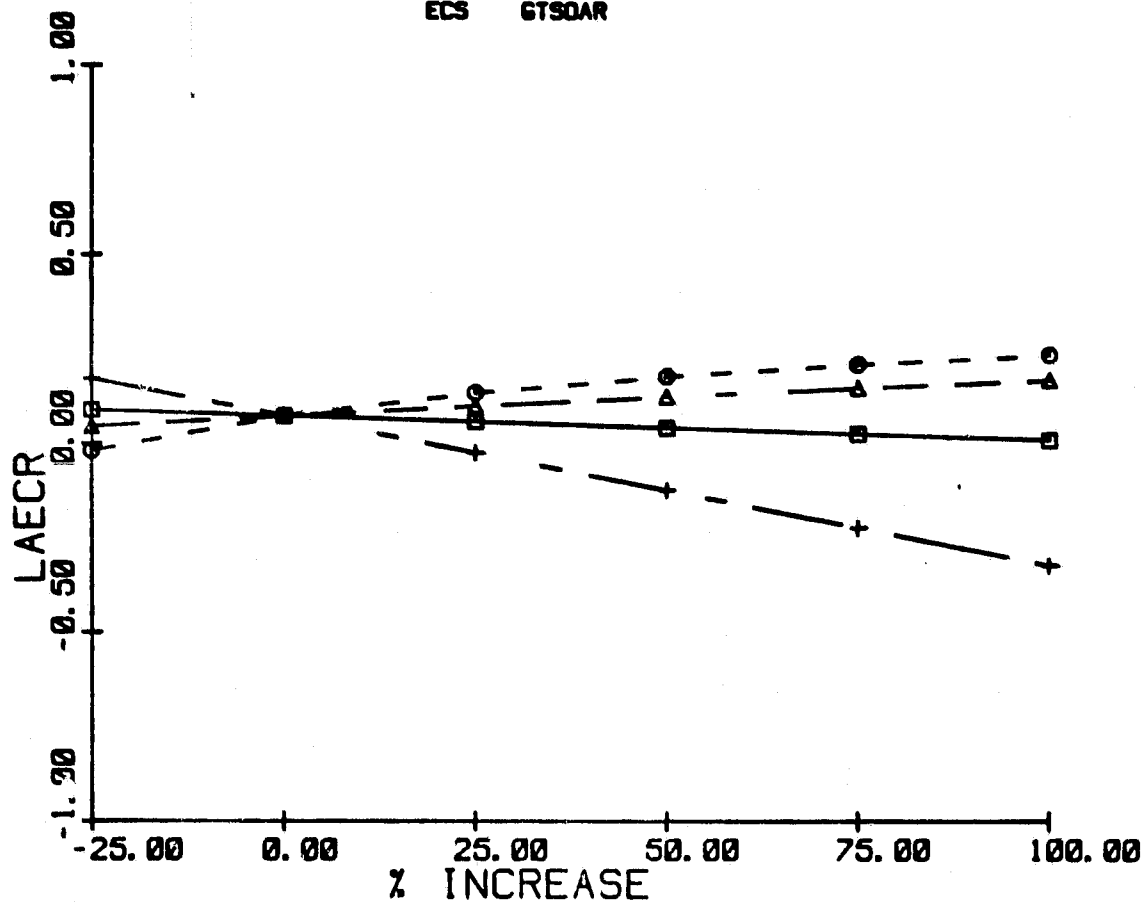
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS GTSOAR



BASE CASE

PROCESS

MW- 120

PROCESS HEAT- 265

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.545

NO COGENERATION

CAPITAL COST- 10.9

LAEC - 40.101

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 23.2

LAEC - 44.500

RDI - 0

MW(GEN) - 52

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

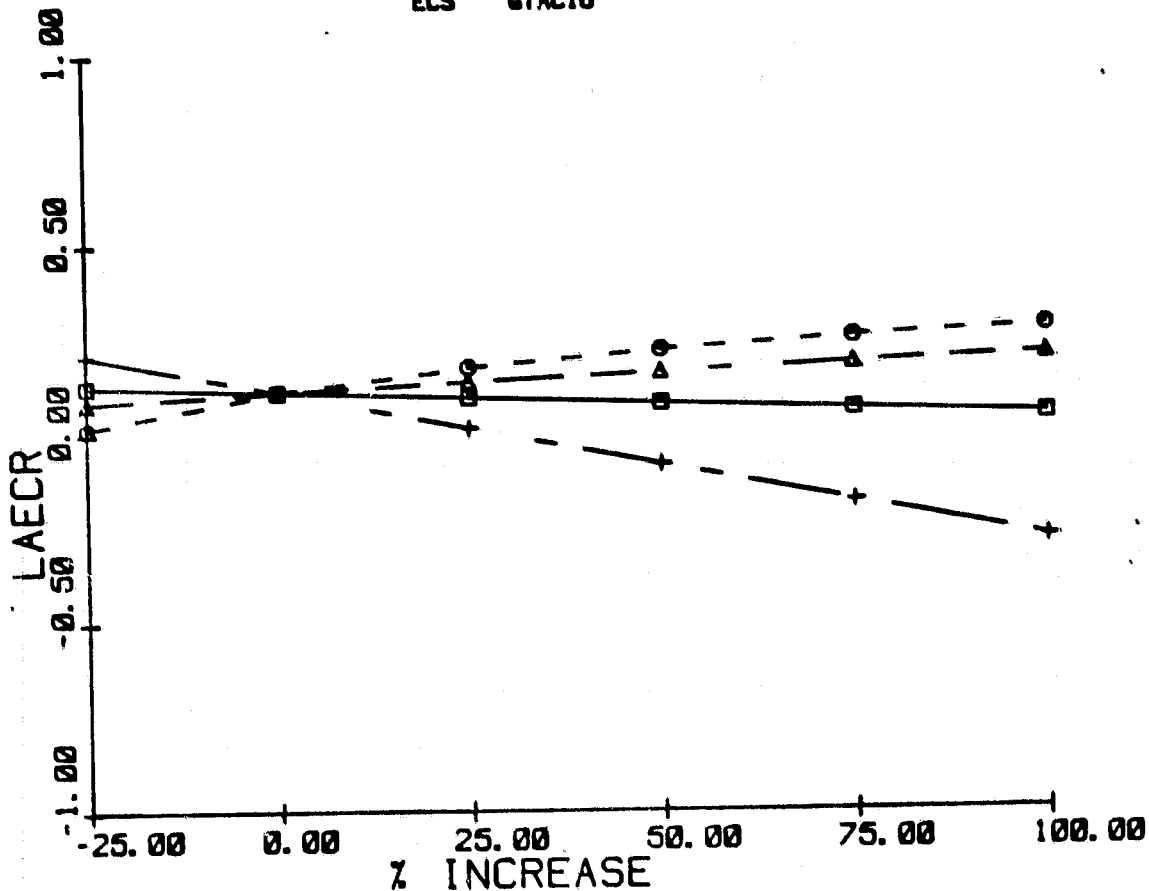
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS GTAC10



BASE CASE

NO COGENERATION

PROCESS

MW- 120

PROCESS HEAT- 265

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.545

CAPITAL COST- 10.9

LAEC - 40.101

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 24.5

LAEC - 42.019

ROI - 0

MW(GEN) - 50

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

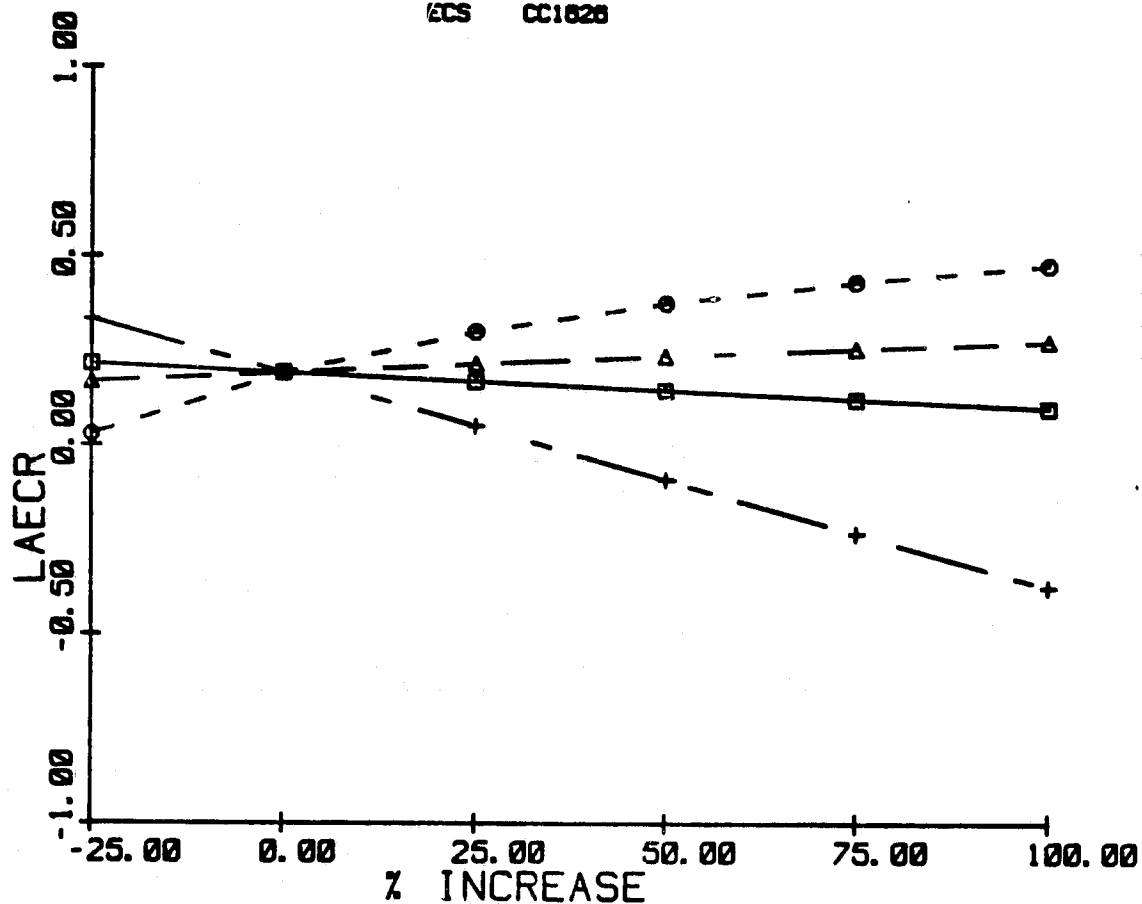
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28121

ECS CC1828



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 265
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 18.9
LAEC - 48.181
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 33.1
LAEC - 36.884
ROI - 0
MW(GEN) - 100
FUEL - RESIDUAL

— — — — — CAPITAL COST
- - - - - ELECTRIC POWER
— — — — — NO-CGN FUEL
+ — — — — ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/10/79

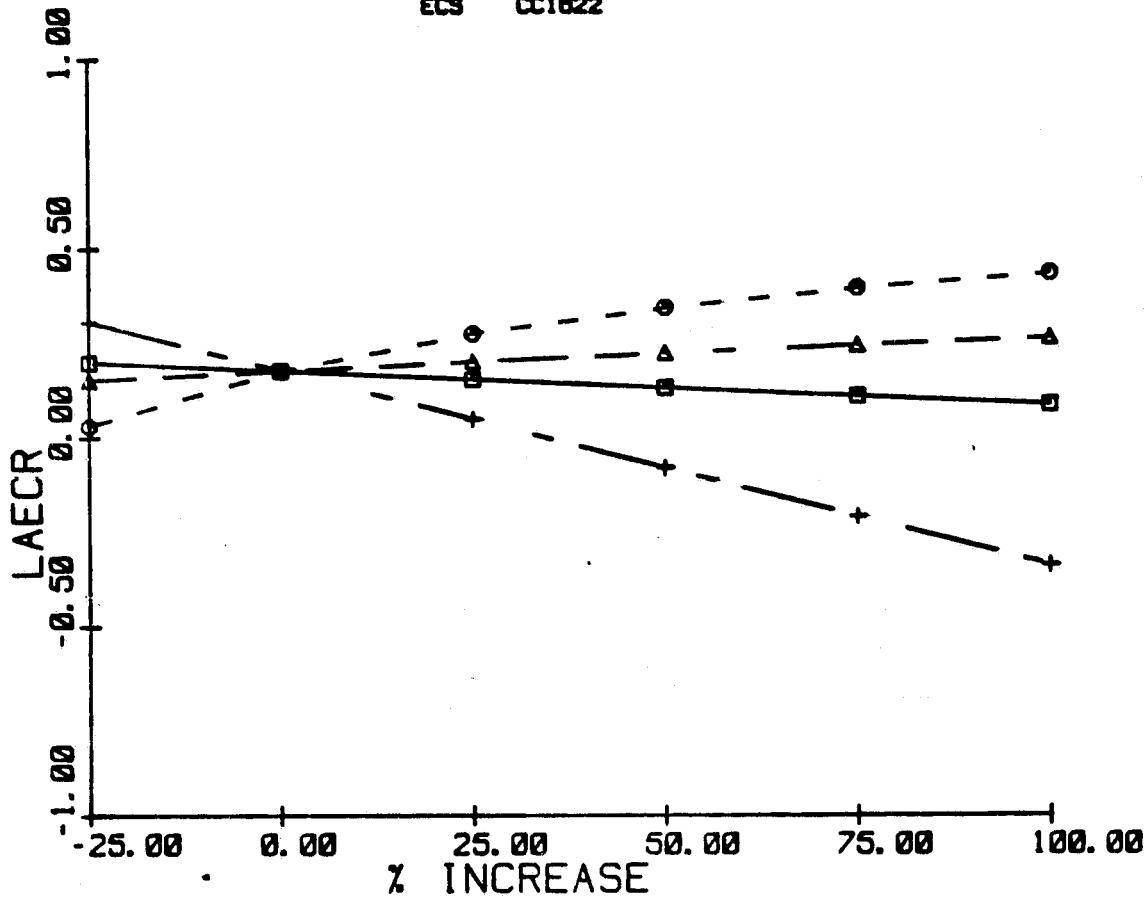
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS CC1022



BASE CASE

PROCESS

MW- 120

PROCESS HEAT- 265

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.545

NO COGENERATION

CAPITAL COST- 18.9

LAEC - 48.101

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 32.0

LAEC - 30.634

ROI - 0

MW(GEN) - 98

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

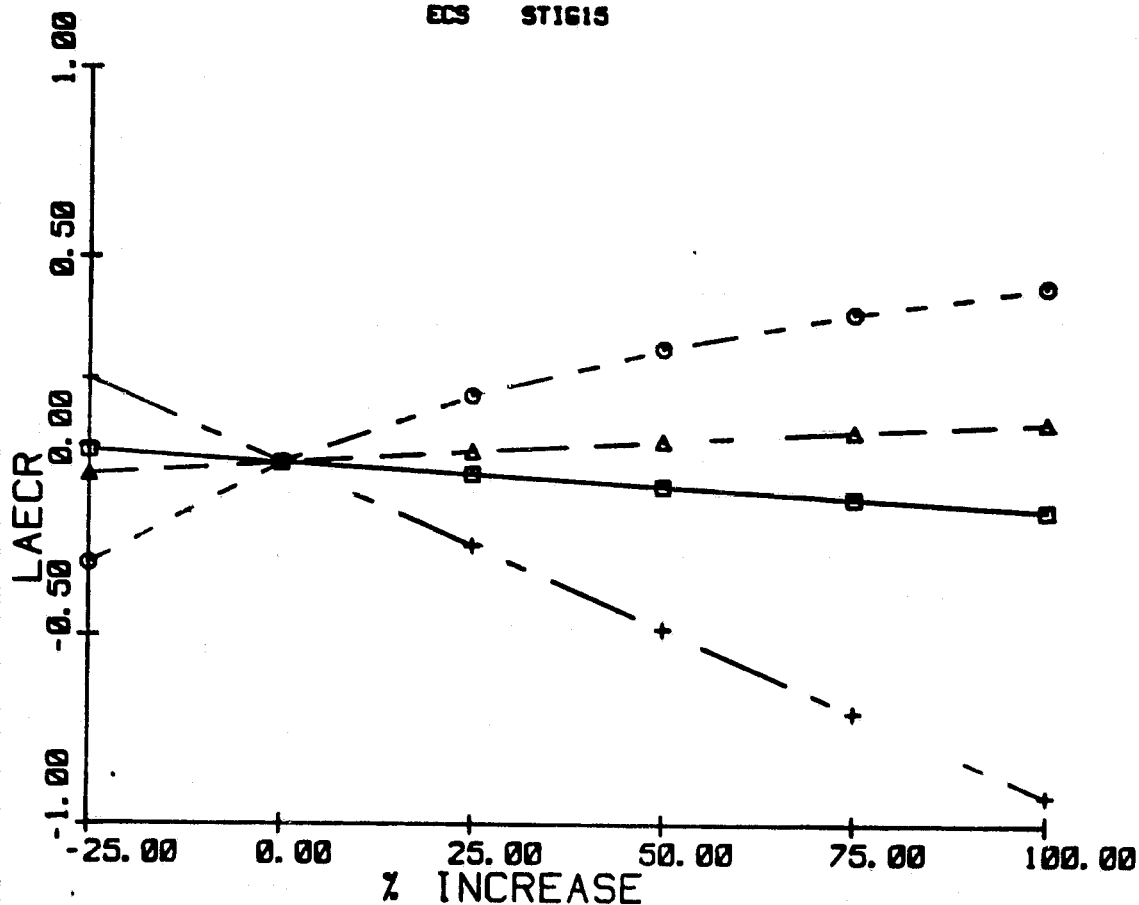
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS STIG15



BASE CASE

NO COGENERATION

PROCESS

MW- 120

PROCESS HEAT- 205

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.545

CAPITAL COST- 10.9

LAEC - 40.101

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 45.9

LAEC - 50.100

ROI - 0

MW(GEN) - 120

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

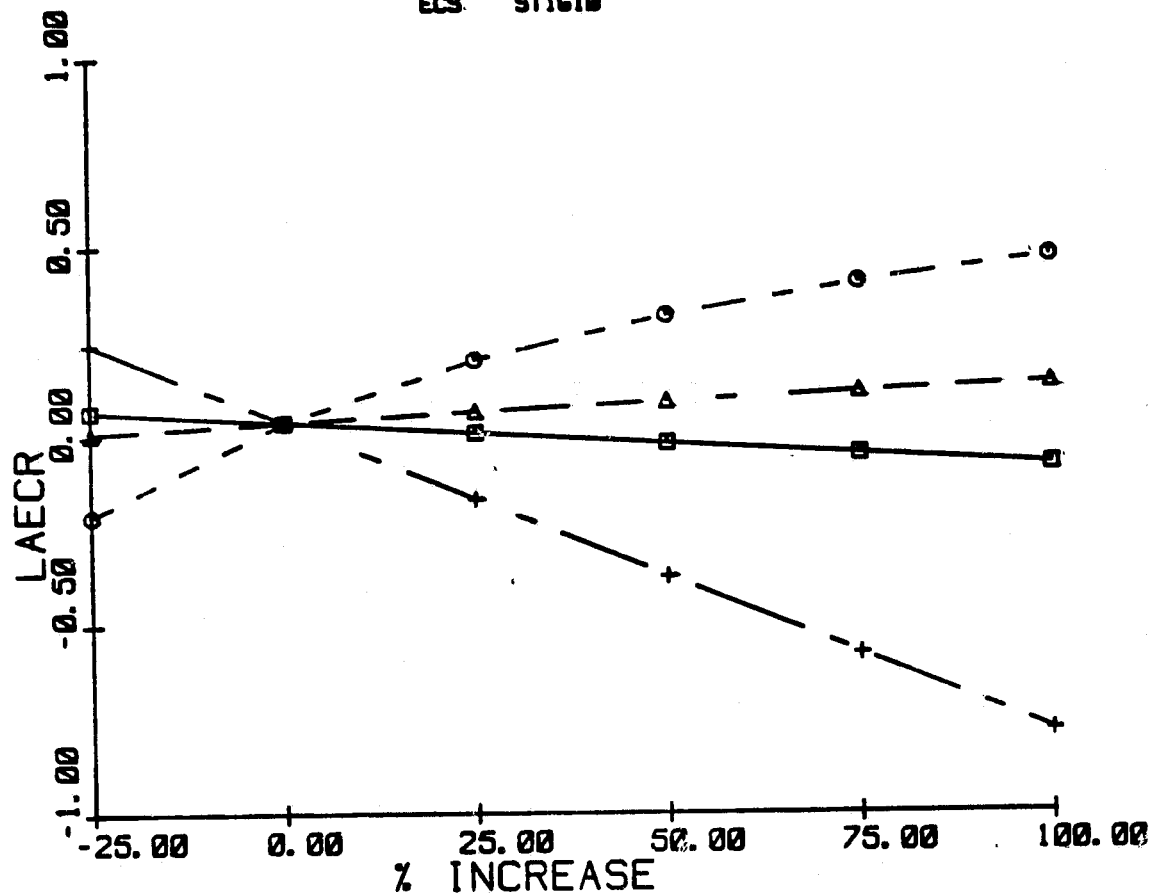
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS STIG10



BASE CASE

NO COGENERATION

PROCESS

MW- 120

PROCESS HEAT- 265

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.545

CAPITAL COST- 10.9

LAEC - 40.101

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 42.5

LAEC - 40.304

ROI - 0

MW(GEN) - 120

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

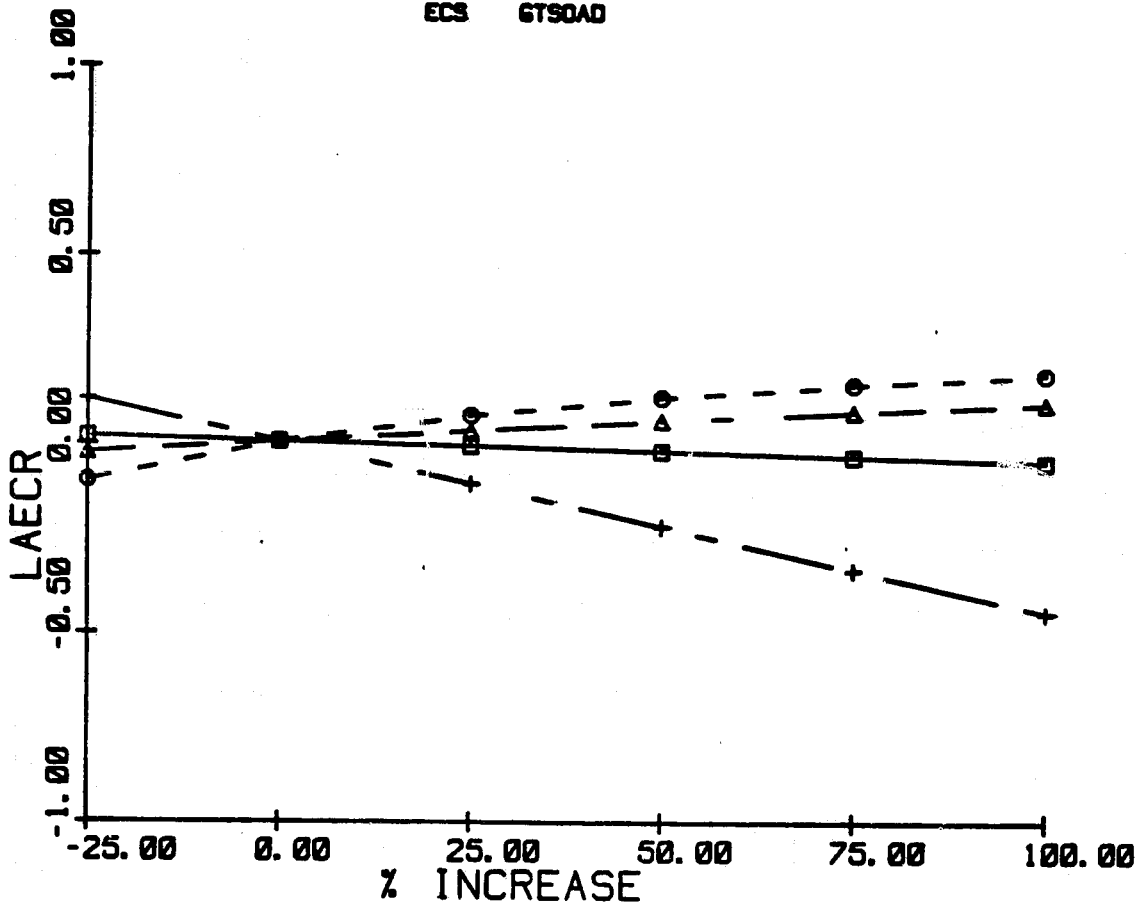
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS 6790AD



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 265
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 10.9
LAEC - 40.101
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.8
LAEC - 47.765
ROI - 0
MW(GEN) - 40
FUEL - DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- Δ — — — Δ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

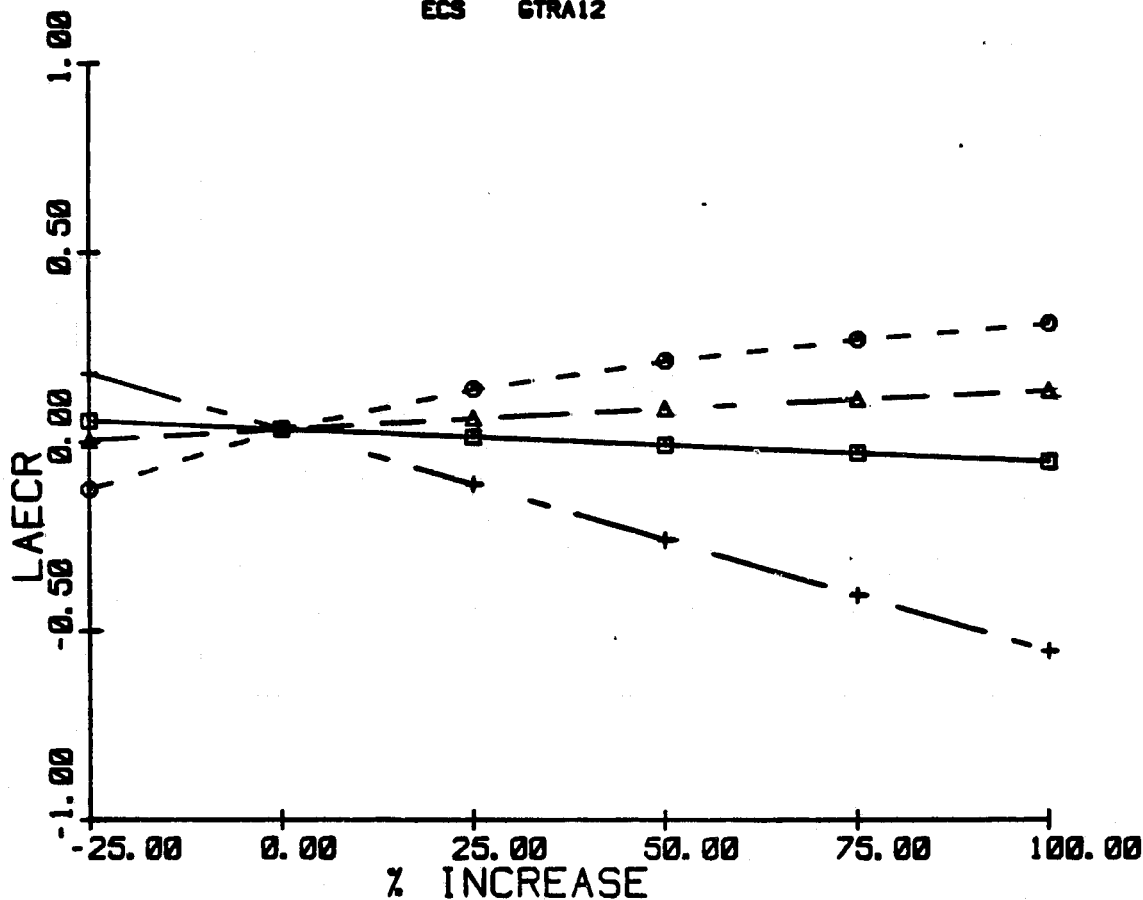
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28121

ECS 6TRA12



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 285
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 18.9
LAEC - 48.101
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 31.9
LAEC - 48.508
ROI - 0
MW(GEN) - 70
FUEL - DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

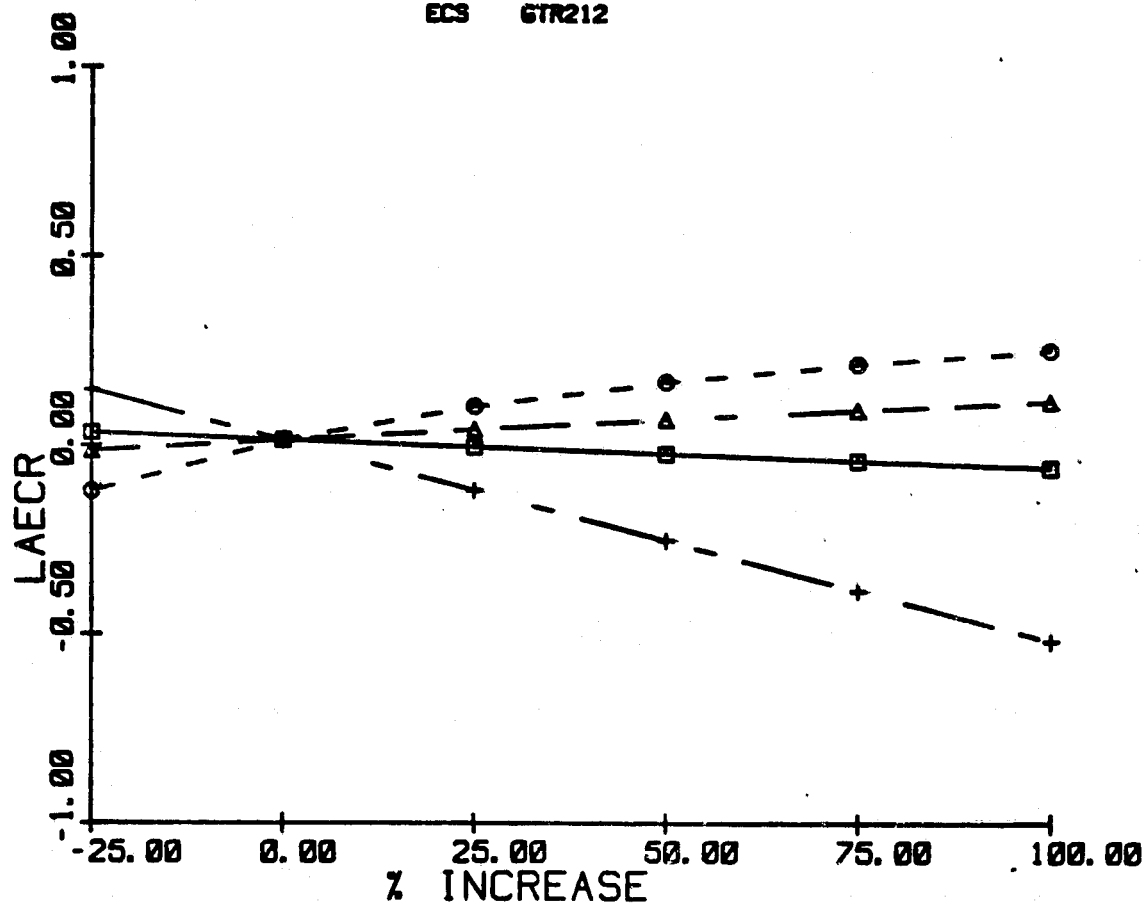
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20121

ECS GTR212



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT-205
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST-10.9
LAEC -48.101
FUEL -COAL-FGD

COGENERATION

CAPITAL COST-27.1
LAEC -47.433
ROI -8
MW(GEN) -65
FUEL -DISTILLA

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

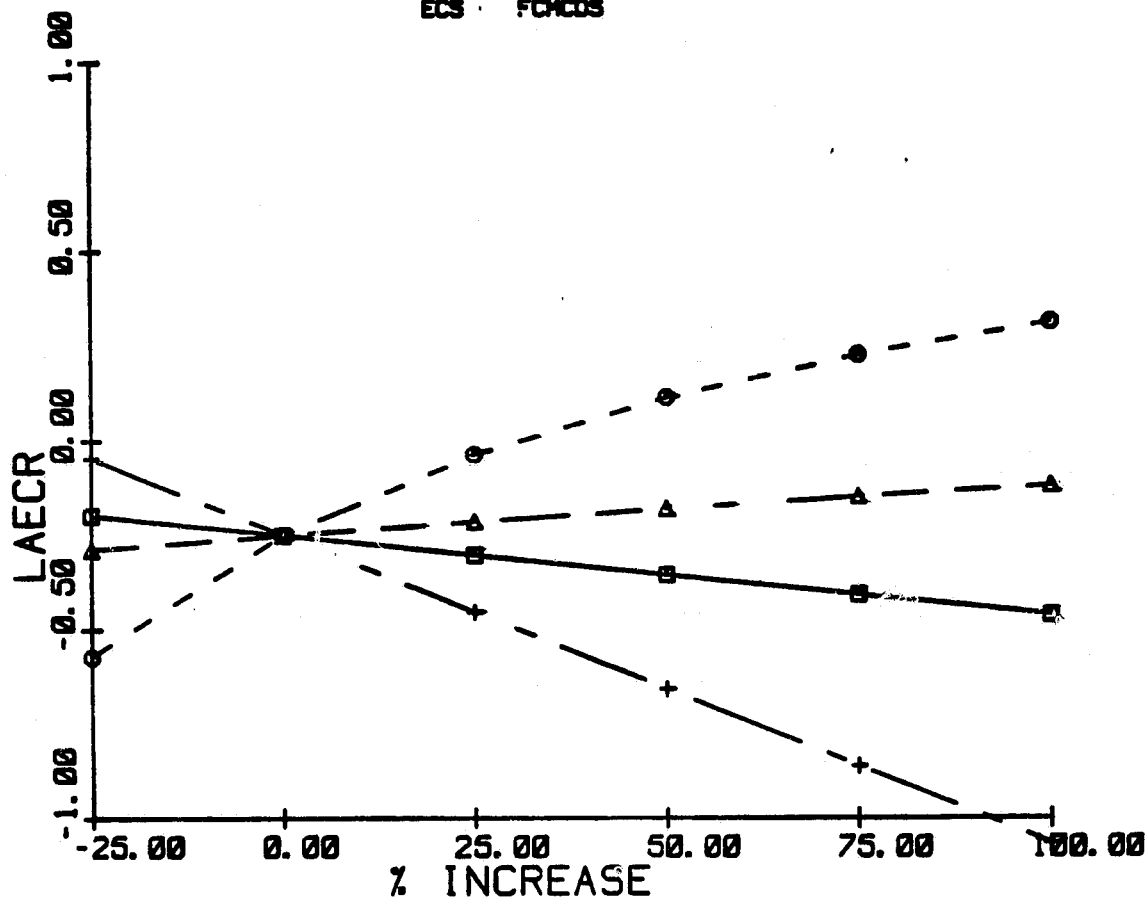
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28121

ECS FCMCOS



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 285
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.545

CAPITAL COST- 18.9
LAEC - 48.181
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 70.0
LAEC - 60.185
ROI - 0
MW(GEN) - 120
FUEL - DISTILLA

— — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
+ + + + + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

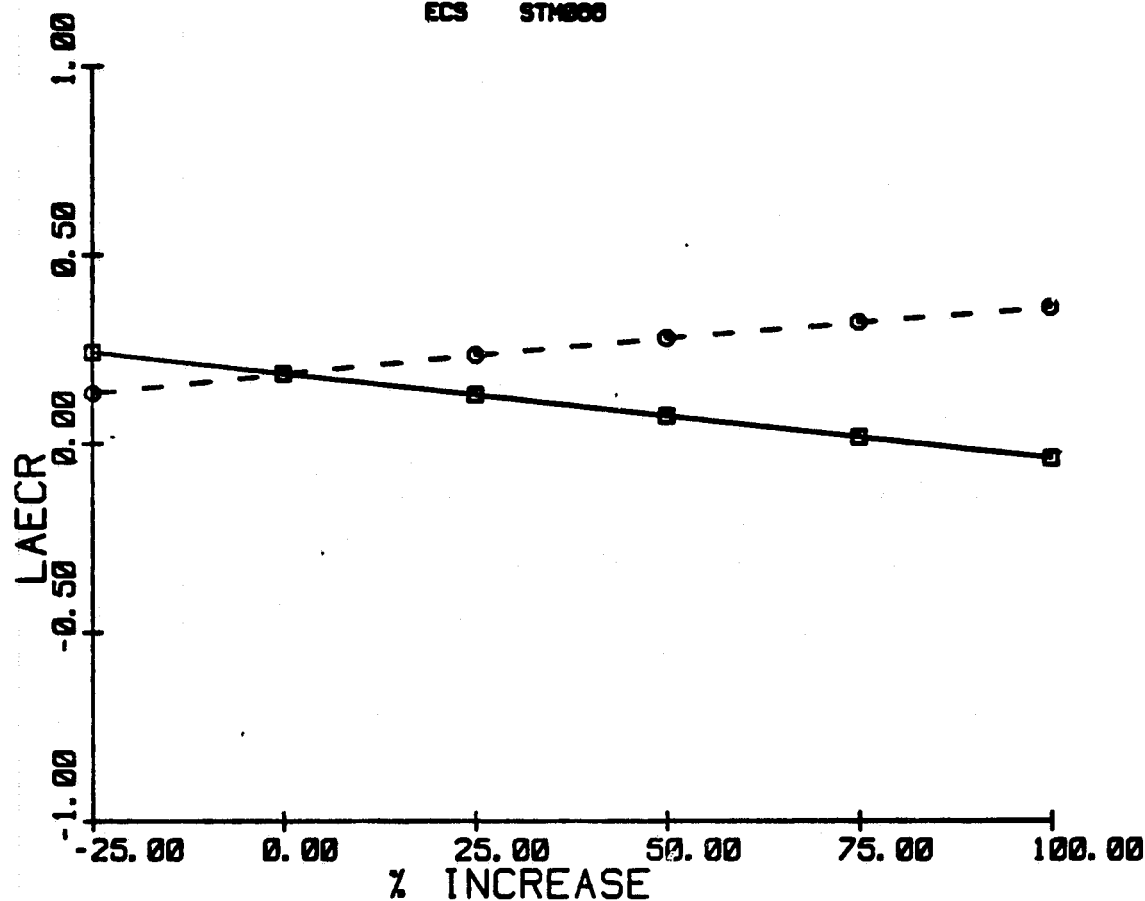
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20212

ECS STM800



BASE CASE

NO COGENERATION

PROCESS
MW- 4
PROCESS HEAT- 207
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.000

CAPITAL COST- 18.1
LAEC -0.325
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 14.0
LAEC -0.703
ROI -0
MW(GEN) -7
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

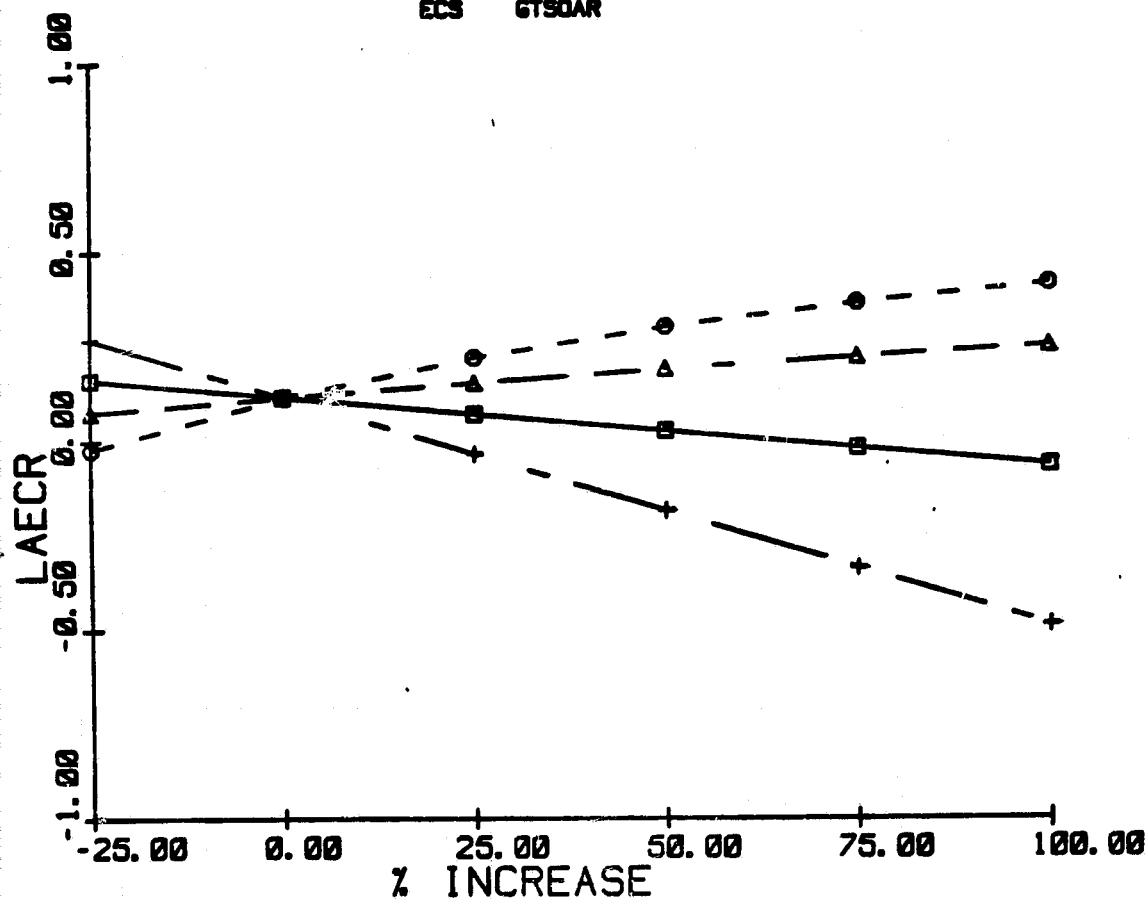
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28221

ECS GTSOAR



BASE CASE

NO COGENERATION

PROCESS

MW- 8

PROCESS HEAT- 35

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.731

CAPITAL COST- 4.2

LAEC - 3.051

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 5.4

LAEC - 3.405

ROI - 8

MW(GEN) - 7

FUEL - RESIDUAL

- CAPITAL COST
- - - - - ELECTRIC POWER
- ▲— NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

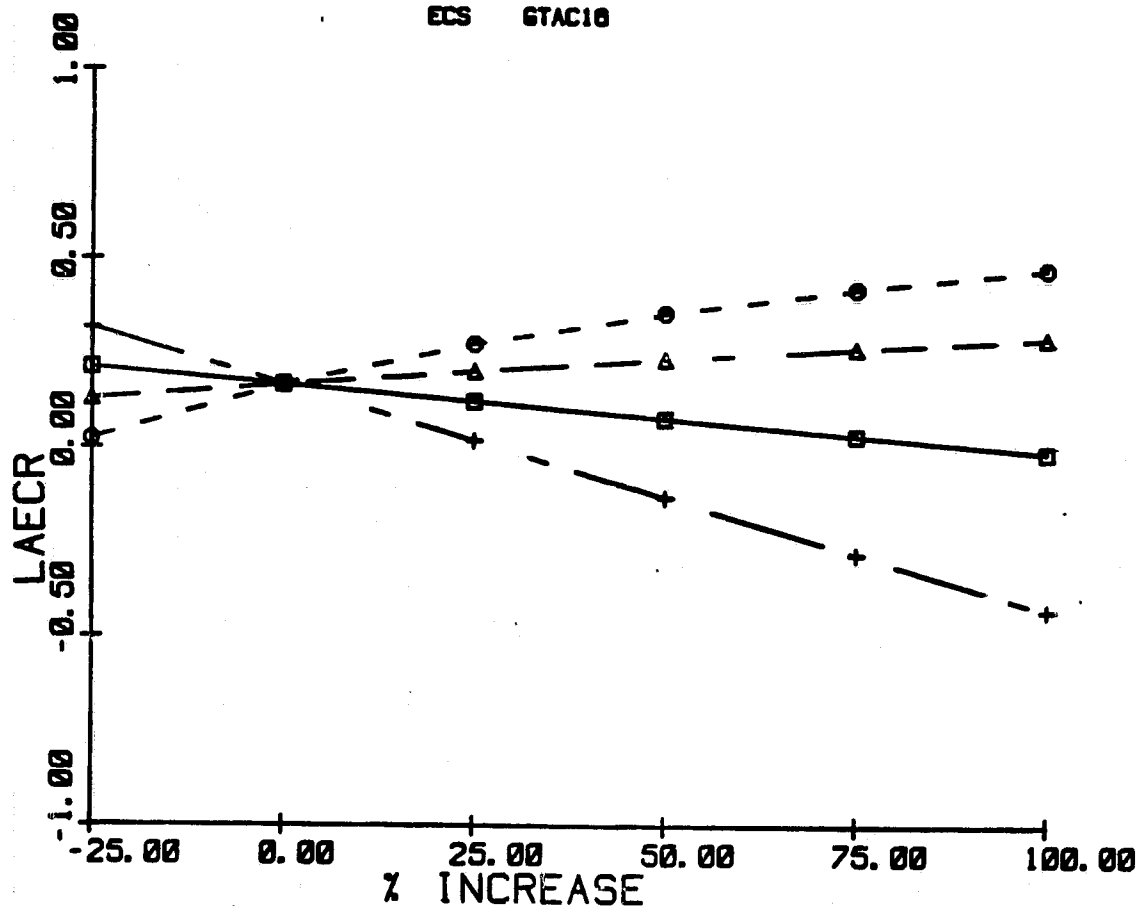
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28221

ECS GTAC18



BASE CASE

NO COGENERATION

PROCESS
MW- 8
PROCESS HEAT- 35
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.731

CAPITAL COST- 4.2
LAEC - 3.051
FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 5.2
LAEC - 3.287
ROI - 0
MW(GEN) - 0
FUEL - RESIDUAL

[Squares] ——— [Squares] CAPITAL COST
 [Circles] - - - [Circles] ELECTRIC POWER
 [Triangles] ——— [Triangles] NO-CGN FUEL
 [Plus] ——— [Plus] ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

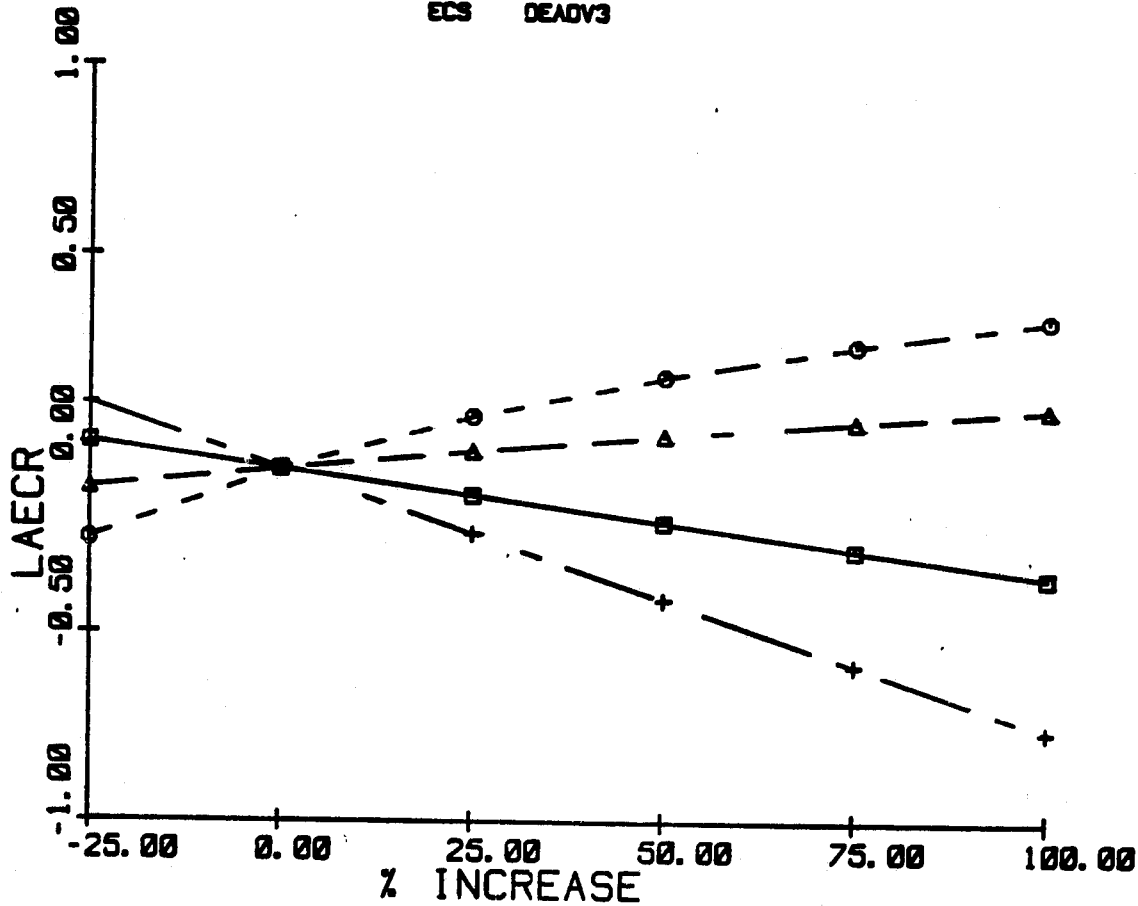
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20221

ECS DEADV3



BASE CASE

NO COGENERATION

PROCESS
MW- 0
PROCESS HEAT- 35
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.731

CAPITAL COST- 4.2
LAEC - 3.051
FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 0.4
LAEC - 4.100
ROI - 0
MW(GEN) - 0
FUEL - RESIDUAL

- CAPITAL COST
- ELECTRIC POWER
- △— NO-CGN FUEL
- +— ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

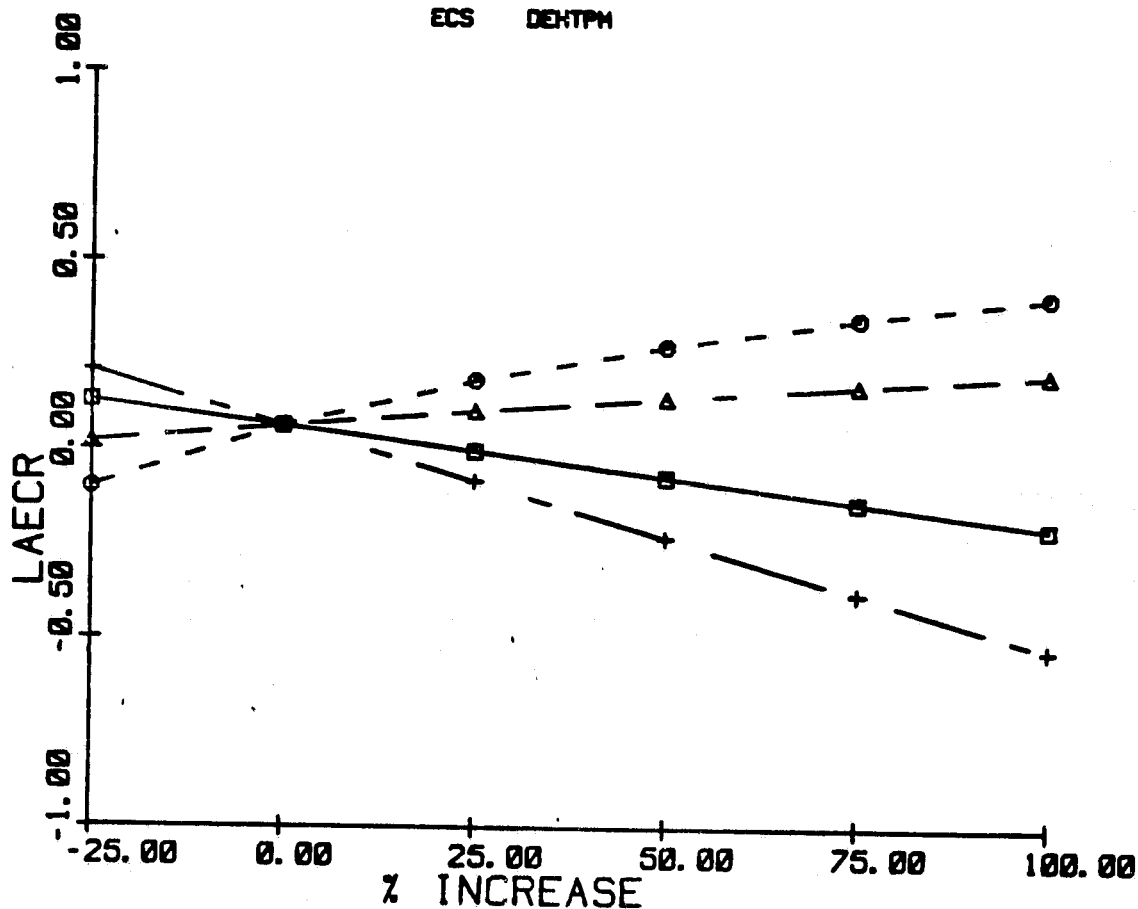
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20221

ECS DENTPM



BASE CASE

NO COGENERATION

PROCESS

MW- 0

PROCESS HEAT- 35

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.731

CAPITAL COST- 4.2

LAEC - 3.051

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 7.0

LAEC - 3.013

ROI - 0

MW(GEN) - 0

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

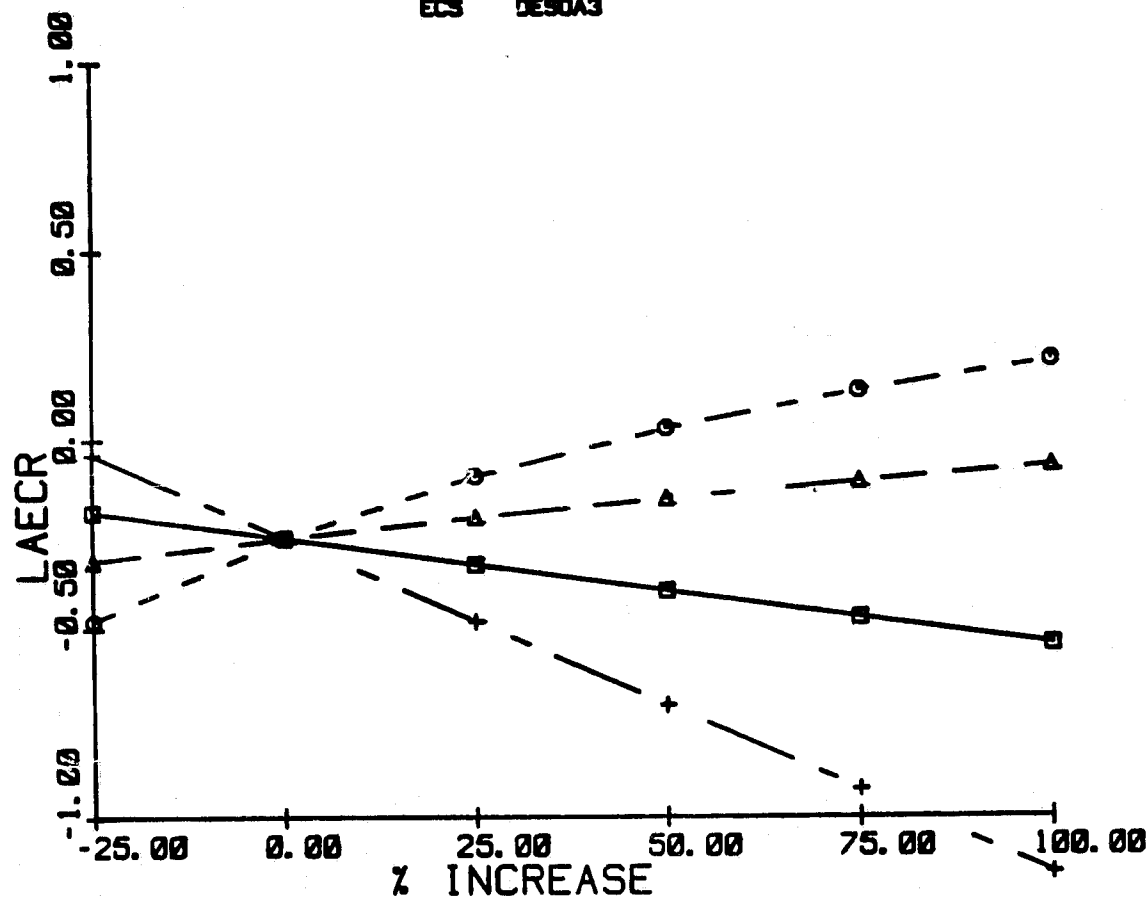
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28221

ECS DES0A3



BASE CASE

NO COGENERATION

PROCESS

MW- 8

PROCESS HEAT- 35

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.731

CAPITAL COST- 4.2

LAEC - 3.851

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 0.3

LAEC - 4.858

ROI - 0

MW(GEN) - 8

FUEL - DISTILLA

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

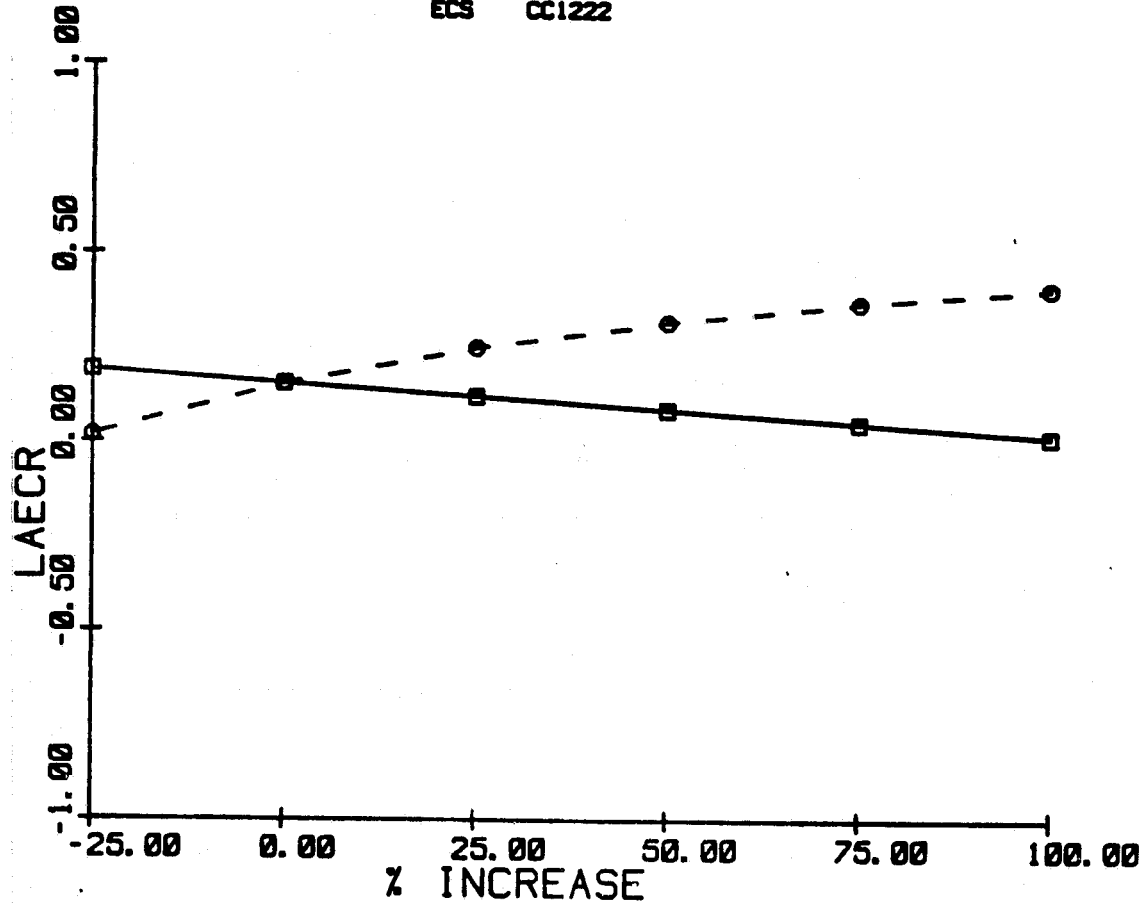
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20242

ECS CC1222



BASE CASE

NO COGENERATION

PROCESS
MW- 11
PROCESS HEAT- 23
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.032

CAPITAL COST- 1.5
LAEC - 4.910
FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 5.1
LAEC - 4.100
ROI - 0
MW(GEN) - 0
FUEL - RESIDUAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/10/79

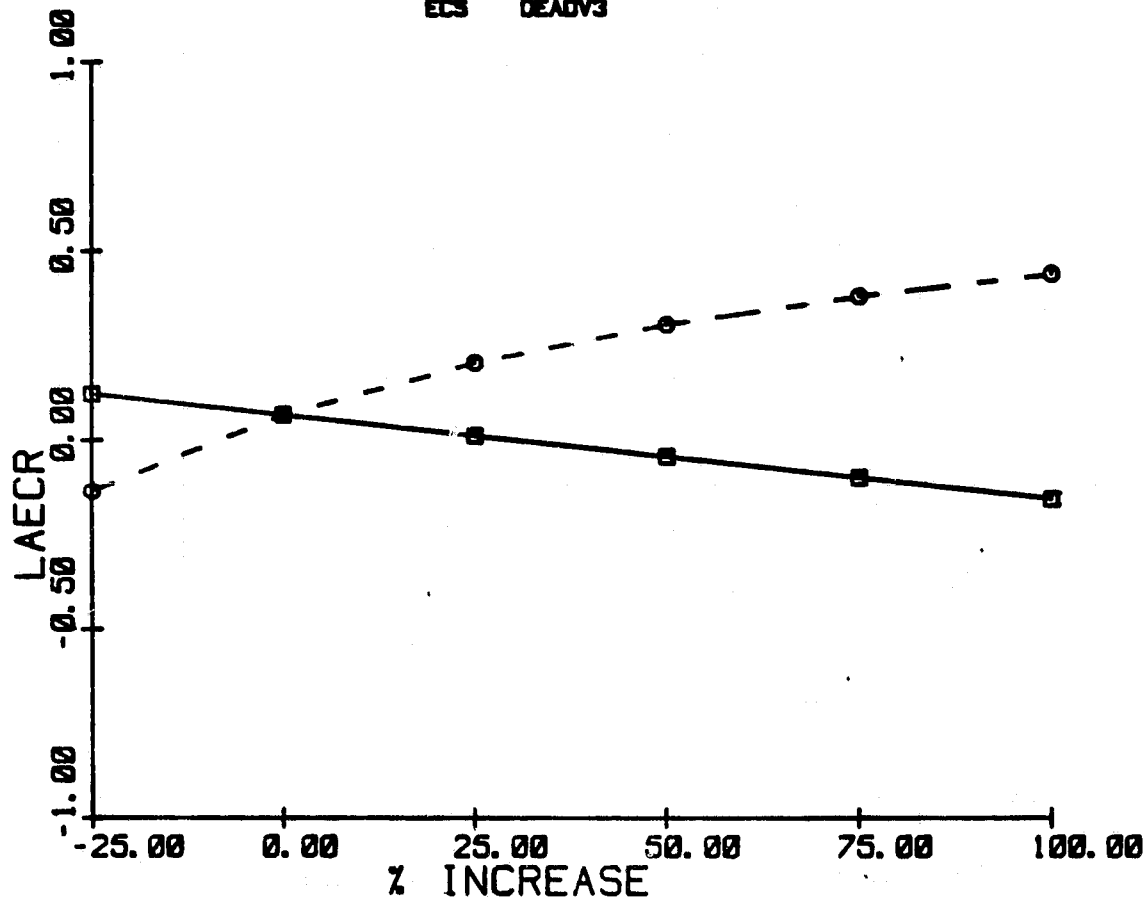
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28242

ECS DEADV3



BASE CASE

NO COGENERATION

PROCESS
MW- 11
PROCESS HEAT- 23
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 1.632

CAPITAL COST- 1.5
LAEC - 4.919
FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 8.4
LAEC - 4.593
ROI - 0
MW(GEN) - 10
FUEL - RESIDUAL

—■— CAPITAL COST
- - - - - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

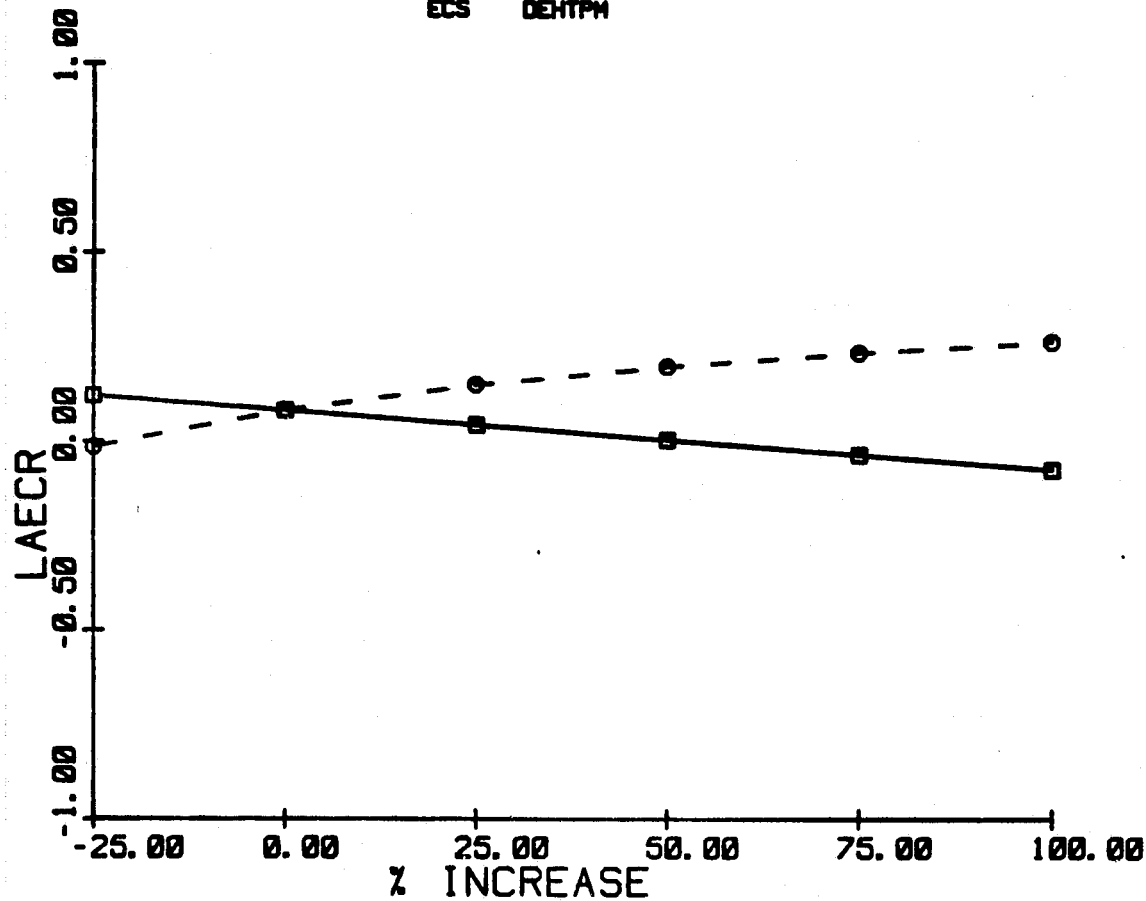
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28242

ECS DEHTPM



BASE CASE

NO COGENERATION

PROCESS

MW- 11

PROCESS HEAT- 23

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.032

CAPITAL COST- 1.5

LAEC - 4.910

FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 5.9

LAEC - 4.510

ROI - 0

MW(GEN) - 0

FUEL - RESIDUAL

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/18/79

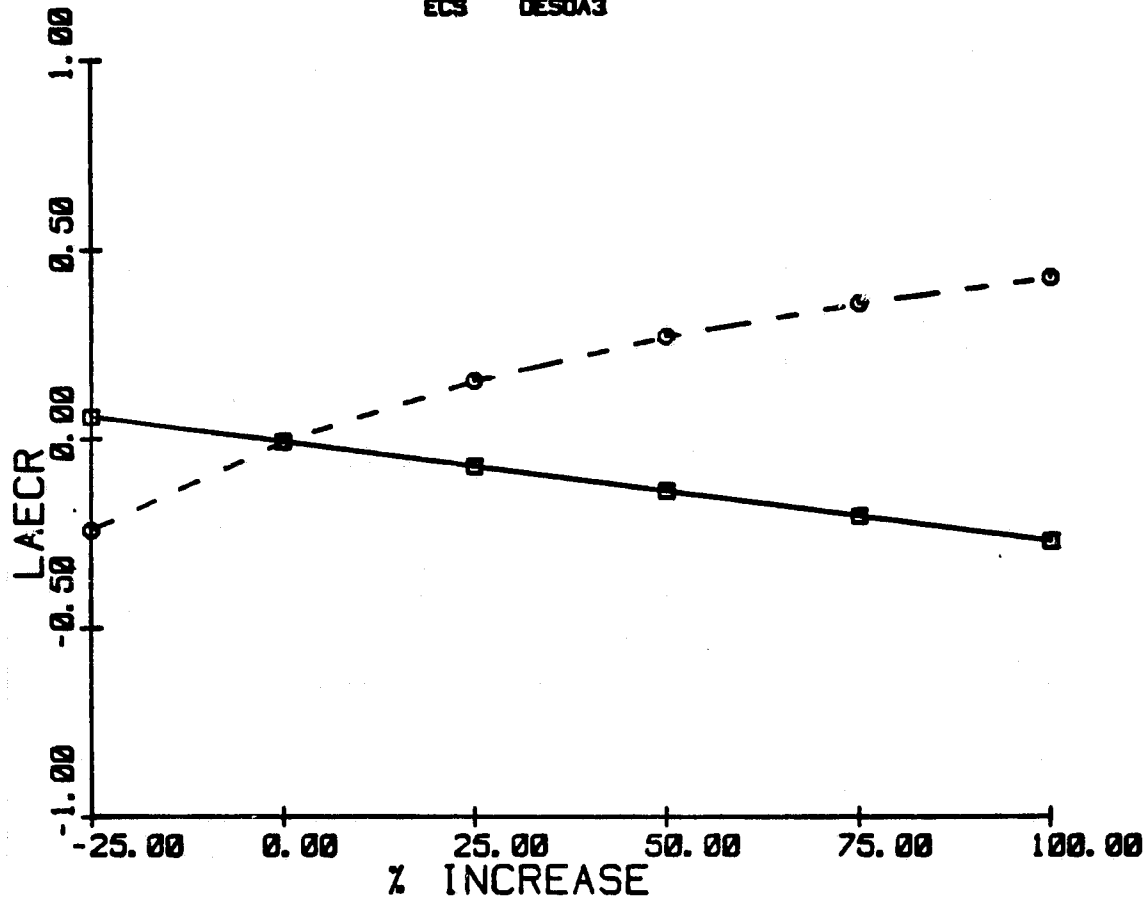
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28242

ECS DES0A3



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 11		CAPITAL COST- 0.9
PROCESS HEAT- 23	CAPITAL COST- 1.5	LAEC - 4.957
(BTU*10**6)	LAEC - 4.910	ROI - 0
WASTE FUEL- 0	FUEL - RESIDUAL	MW(GEN) - 11
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 1.632		
□ — — — □	CAPITAL COST	
○ — — — ○	ELECTRIC POWER	
	NO-CGN FUEL	
	ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 84/11/79

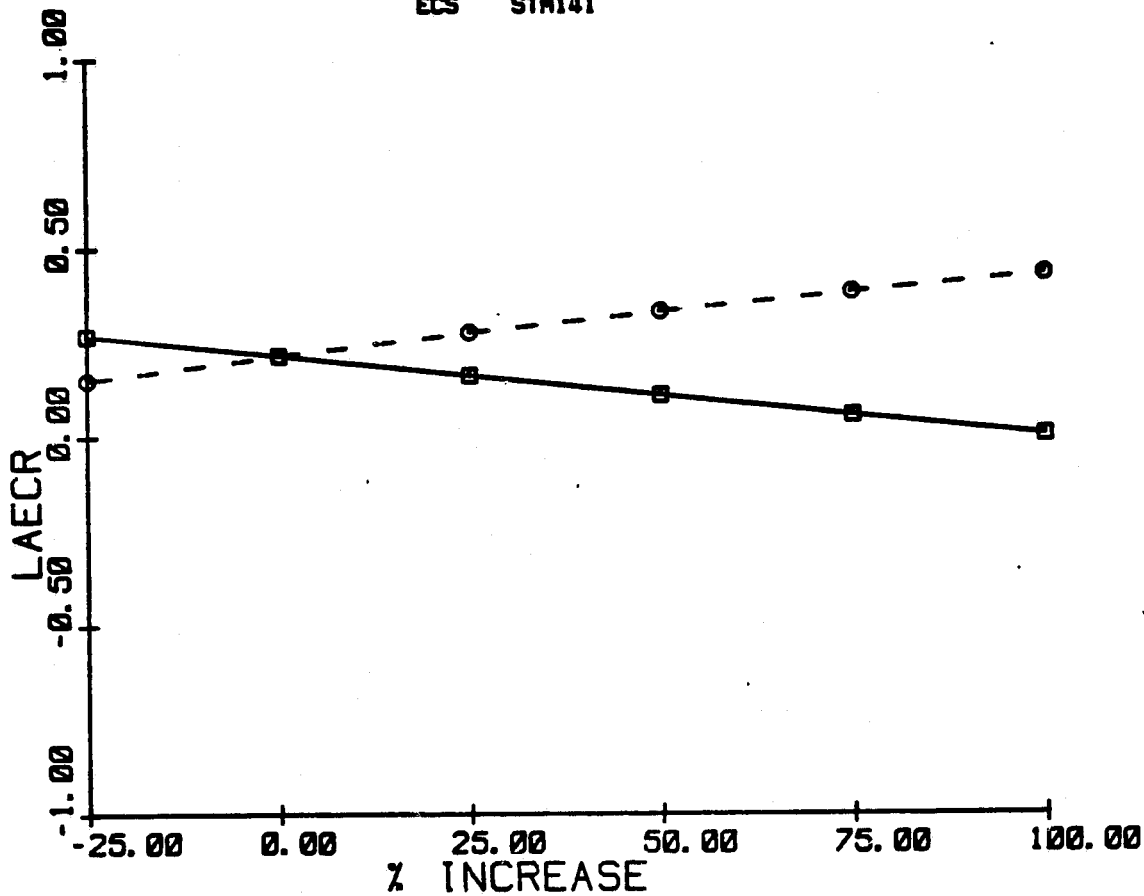
PAGE 170

COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28653

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 8
PROCESS HEAT- 300
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.000

CAPITAL COST- 20.5
LAEC - 11.502
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.2
LAEC - 9.031
ROI - 0
MW(GEN) - 13
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

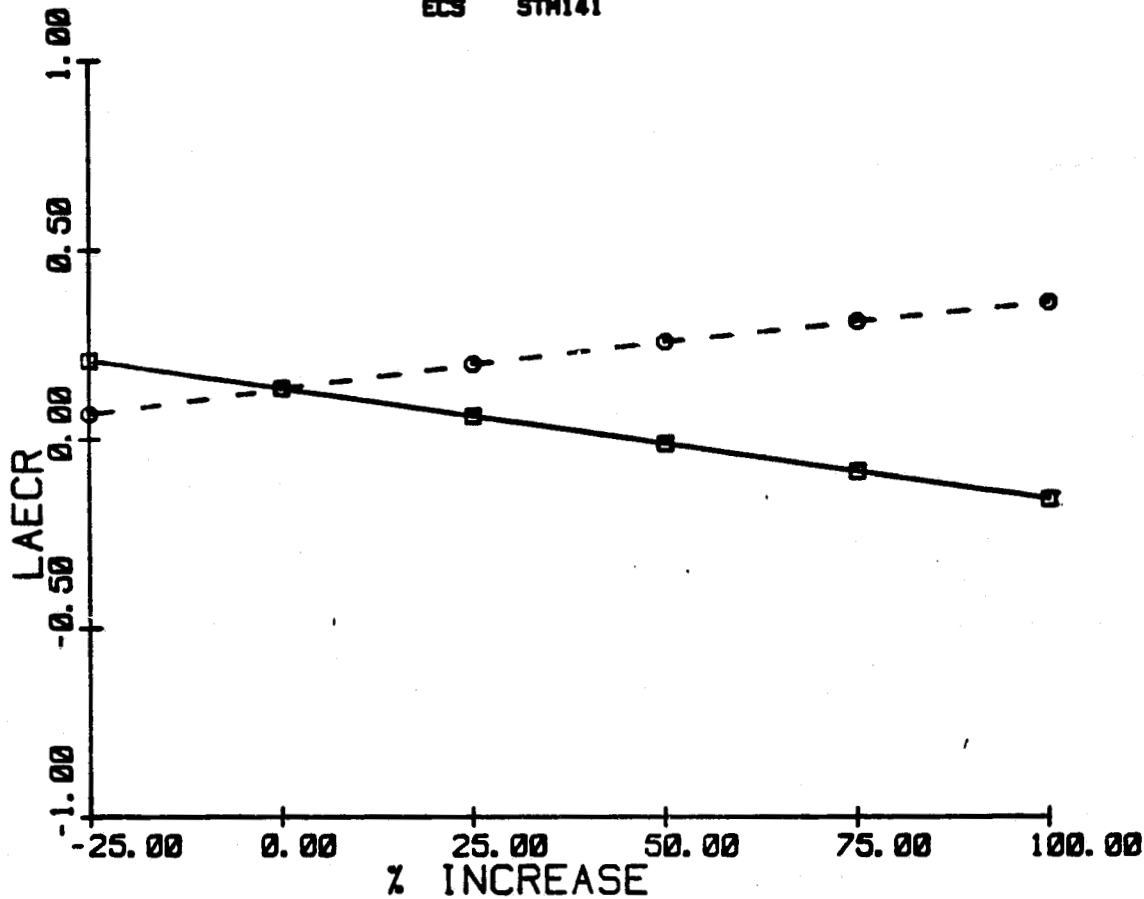
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20653

ECS STM141



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 8		CAPITAL COST- 25.3
PROCESS HEAT- 300	CAPITAL COST- 22.5	LAEC - 0.968
(BTU*10**6)	LAEC - 11.582	ROI - 8
WASTE FUEL- 8	FUEL - COAL-FGD	MW(GEN) - 13
(BTU*10**6)		FUEL - COAL-FGD
POWER/HEAT- 0.068		
<div> <div>—■—</div> <div>—○—</div> </div> CAPITAL COST ELECTRIC POWER	NO-CGN FUEL ECS FUEL	

GENERAL ELECTRIC COMPANY

DATE 04/11/70

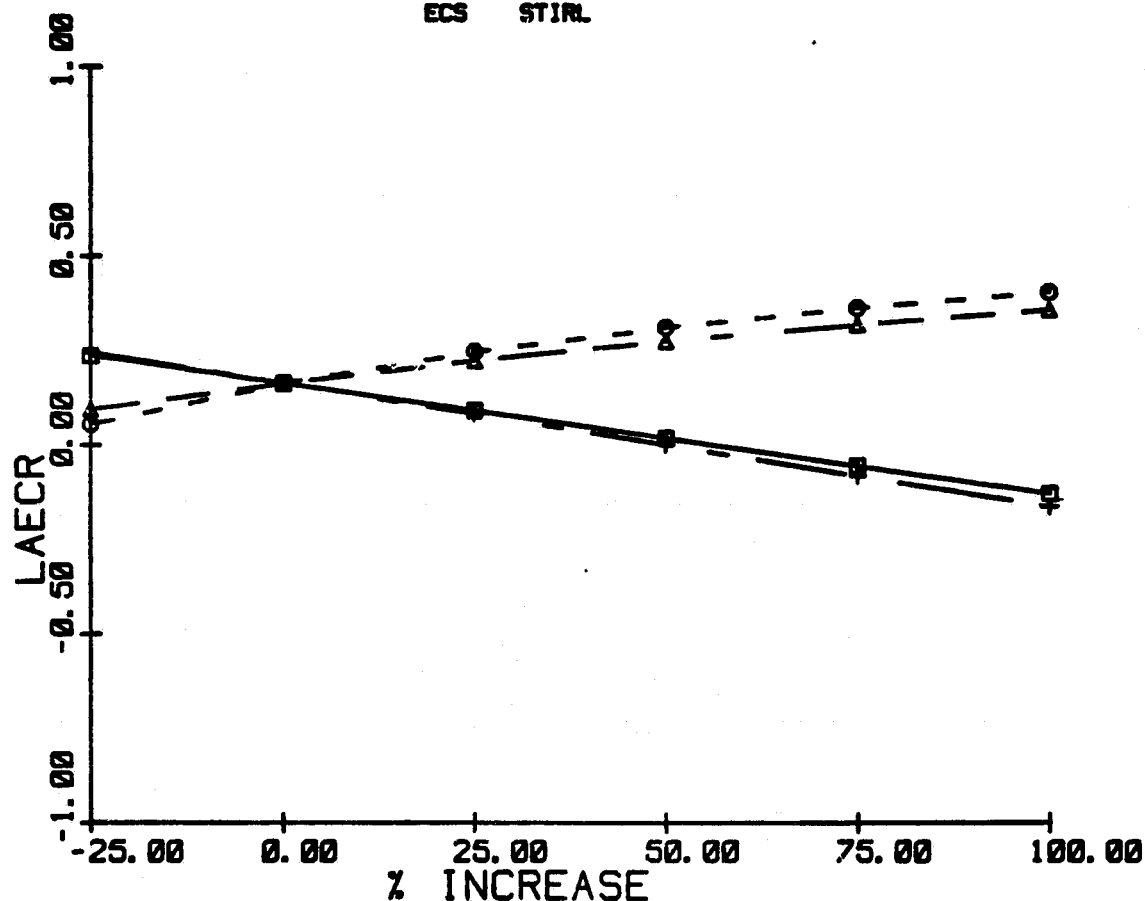
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20051

ECS STIRL



BASE CASE

NO COGENERATION

COGENERATION

PROCESS

MW- 4

PROCESS HEAT- 20

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.082

CAPITAL COST- 1.4

LAEC - 2.217

FUEL - RESIDUAL

CAPITAL COST- 5.0

LAEC - 1.055

ROI - 0

MW(GEN) - 3

FUEL - COAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

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OF POOR QUALITY

GENERAL ELECTRIC COMPANY

DATE 04/11/70

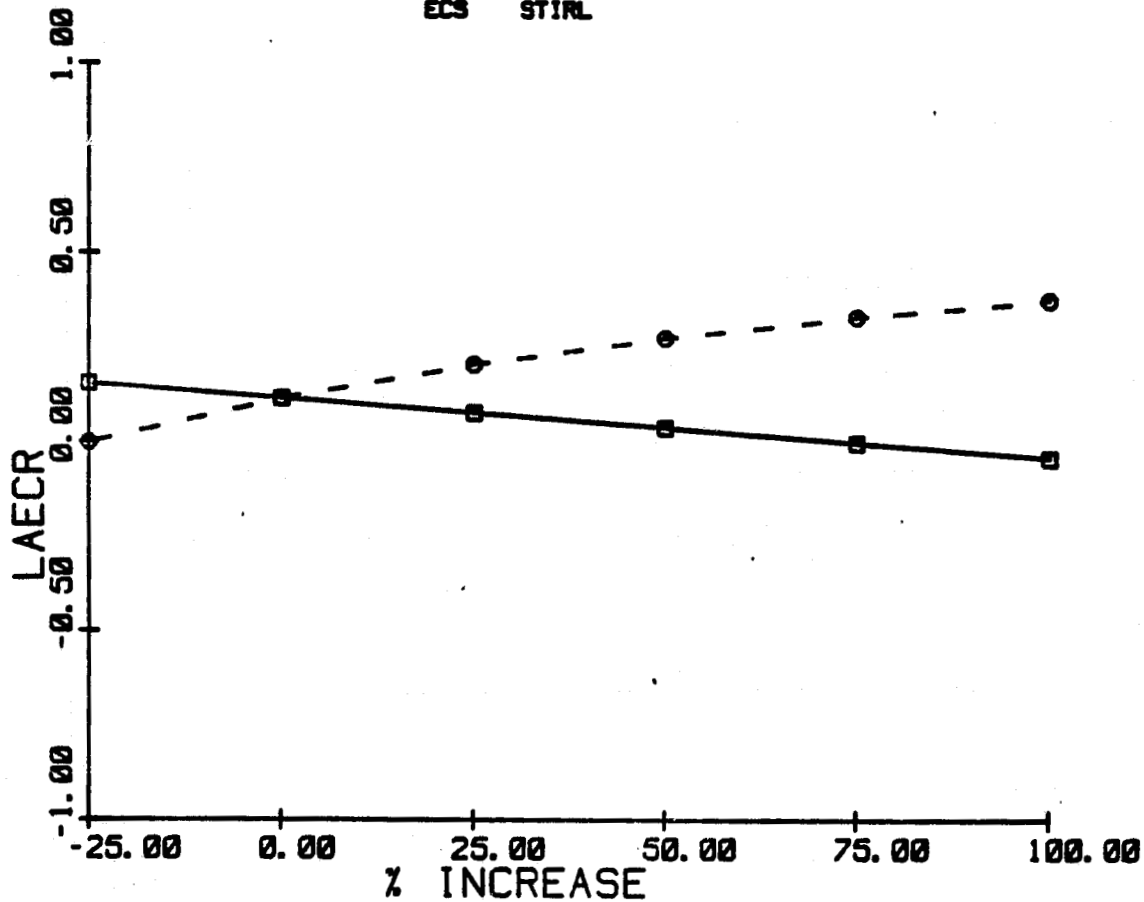
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20051

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 4

PROCESS HEAT- 20

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.002

CAPITAL COST- 1.4

LAEC - 2.217

FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 2.7

LAEC - 1.902

ROI - 0

MW(GEN) - 3

FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/70

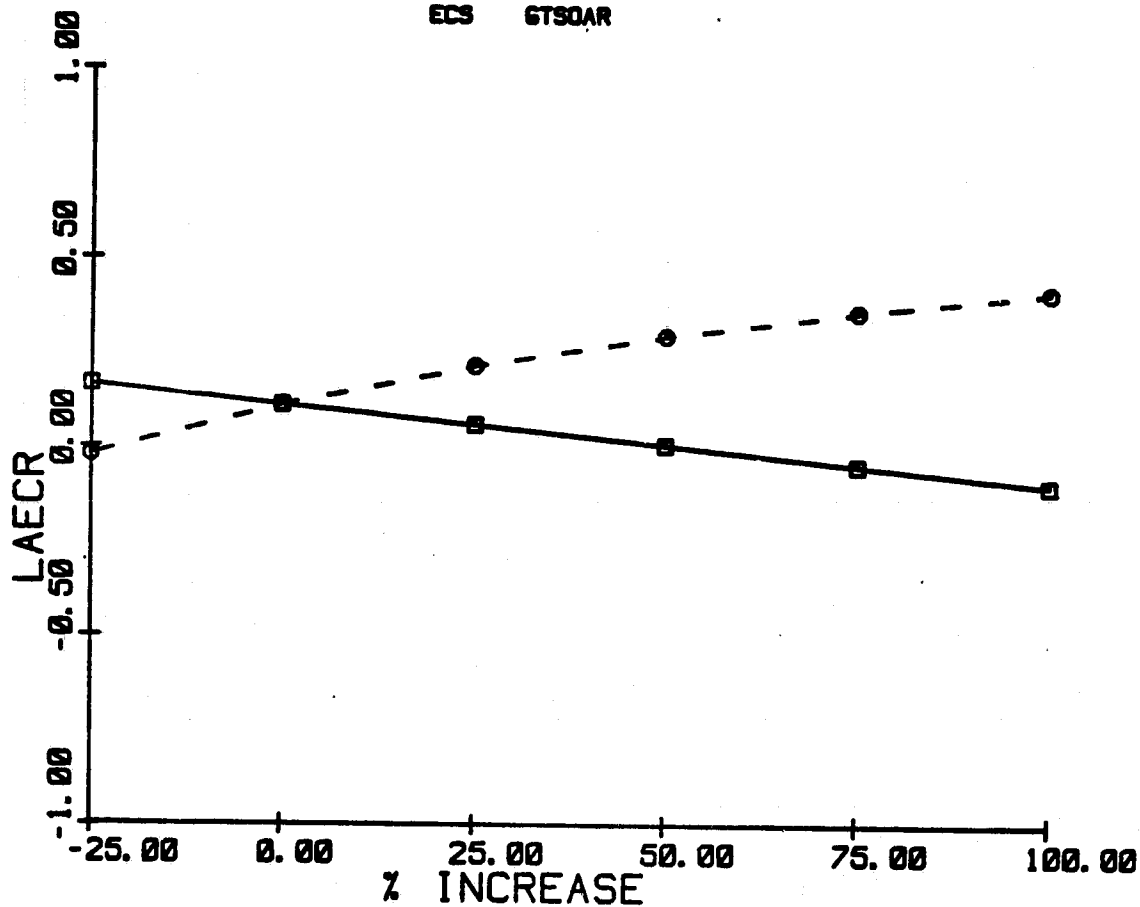
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20051

ECS GTSOAR



BASE CASE NO COGENERATION

PROCESS
MW- 4
PROCESS HEAT- 20
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.002

CAPITAL COST- 1.4
LAEC - 2.217
FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 3.0
LAEC - 1.909
ROI - 0
MW(GEN) - 4
FUEL - RESIDUAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

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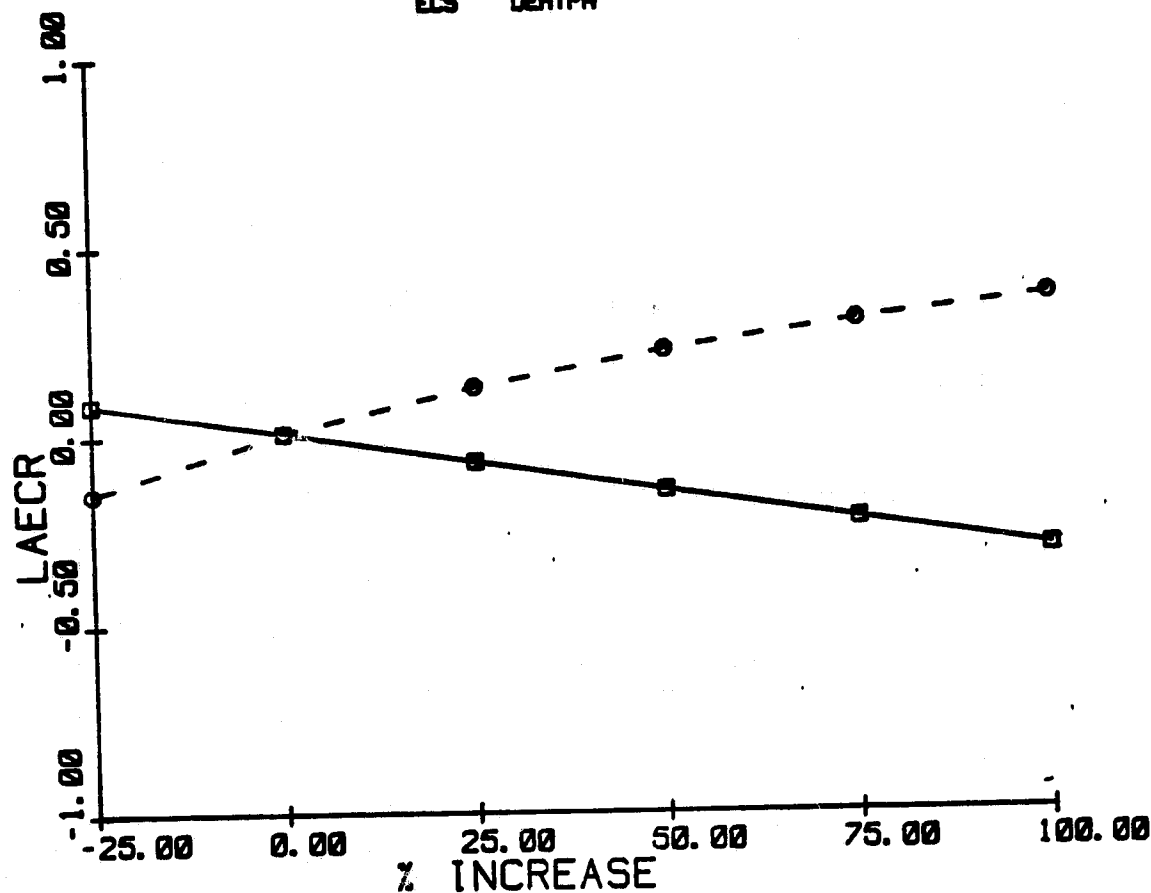
DATE 84/11/79

COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20001

ECS DENTPM



BASE CASE

NO COGENERATION

PROCESS
MW- 4
PROCESS HEAT- 20
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.002

CAPITAL COST- 1.4
LAEC - 2.217
FUEL - RESIDUAL

COGENERATION

CAPITAL COST- 5.3
LAEC - 2.200
ROI - 0
MW(GEN) - 4
FUEL - RESIDUAL

—■— CAPITAL COST
- - - - - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

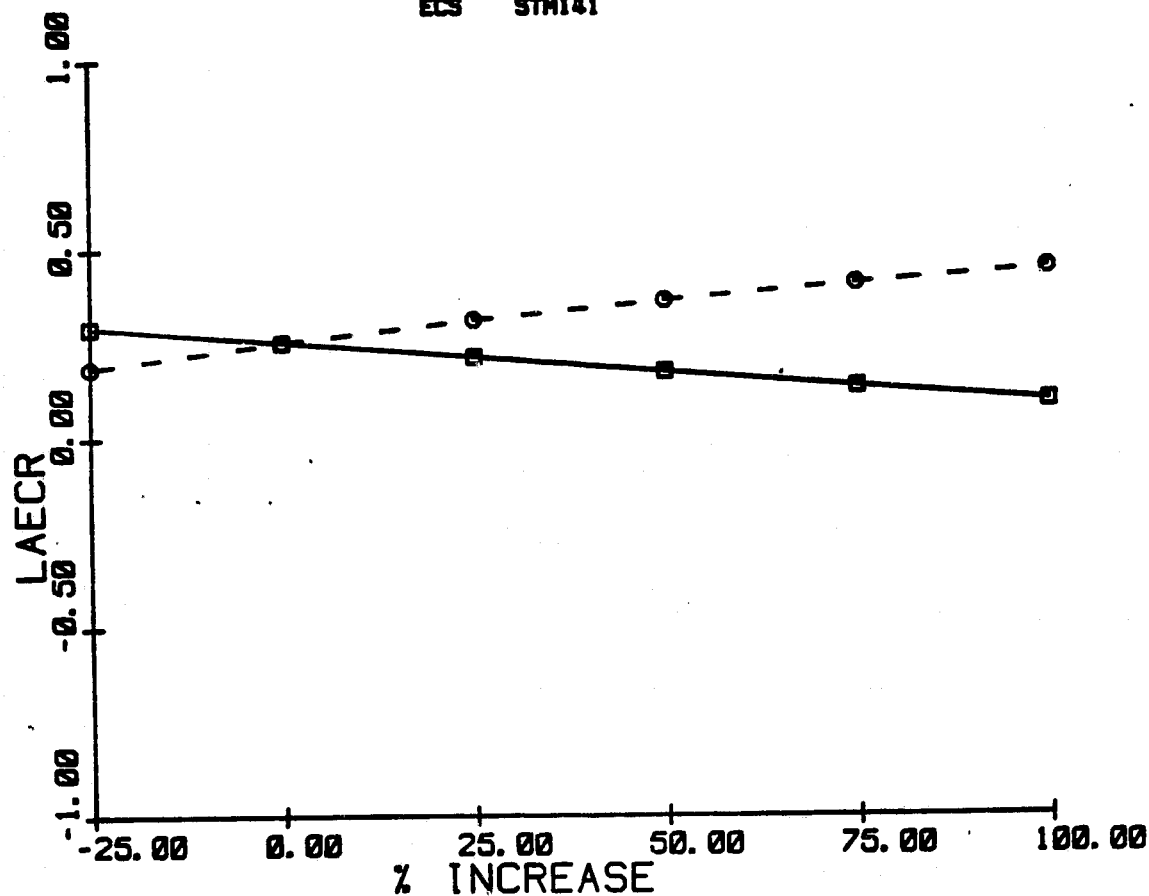
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20112

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 52

PROCESS HEAT- 1333

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.133

CAPITAL COST- 77.5

LAEC - 58.784

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 69.0

LAEC - 43.839

ROI - 8

MW(GEN) - 60

FUEL - COAL-AFB

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

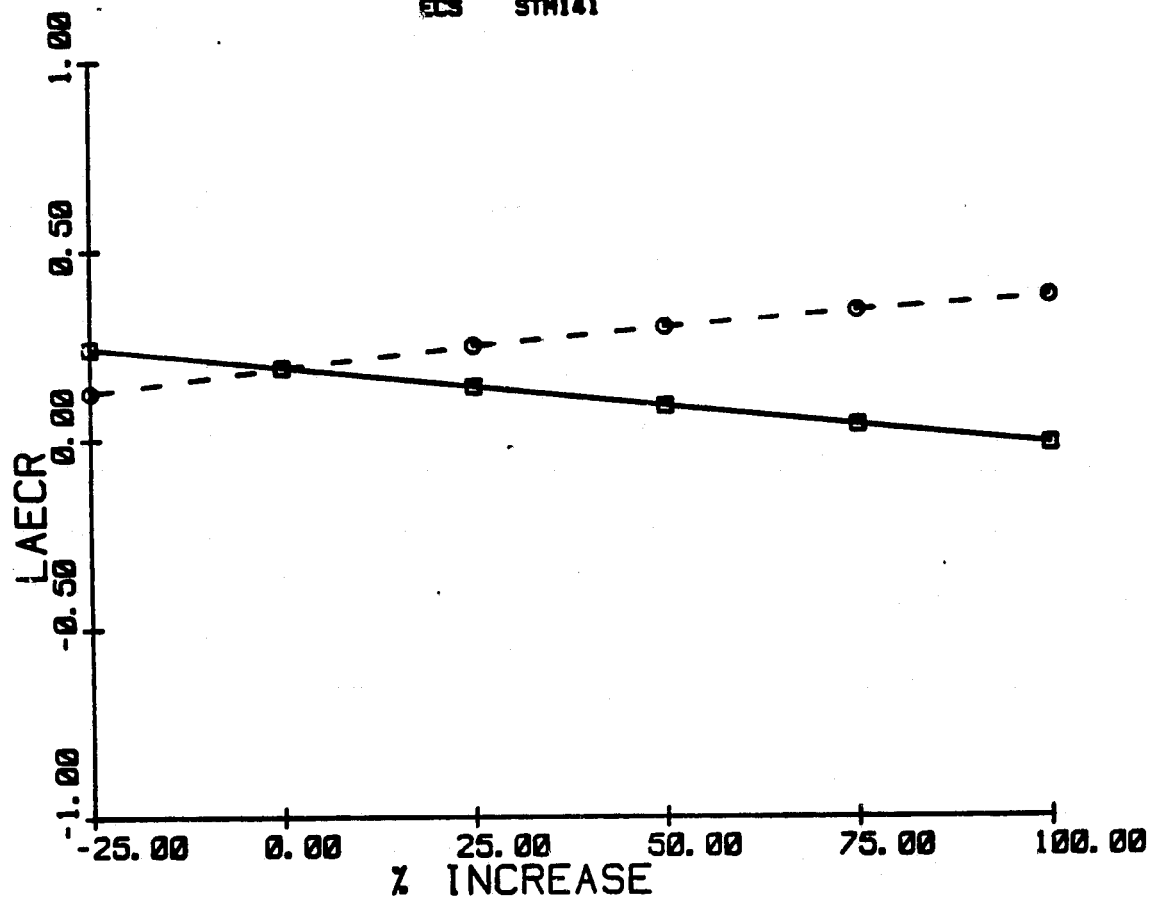
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20112

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 52
PROCESS HEAT- 1333
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.133

CAPITAL COST- 77.5
LAEC - 58.784
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 88.1
LAEC - 47.847
ROI - 8
MW(GEN) - 52
FUEL - COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/70

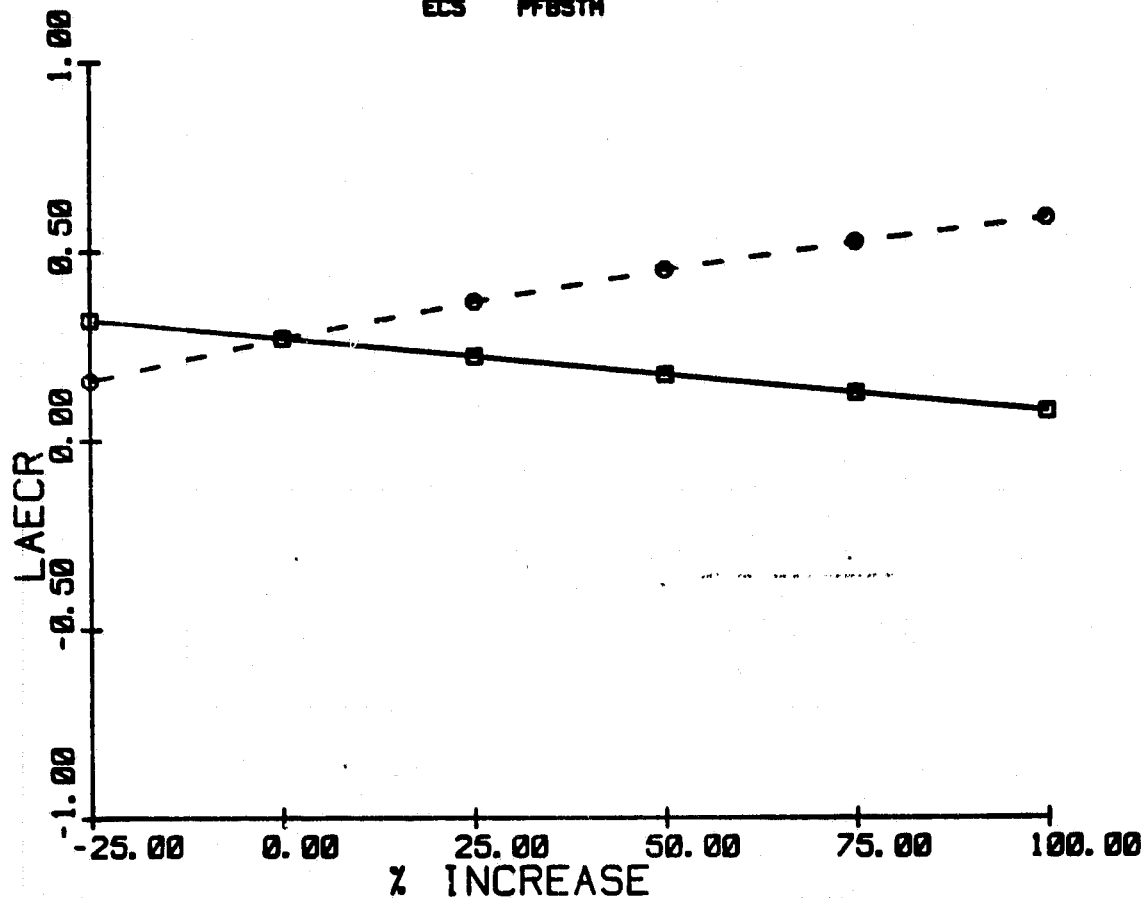
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20112

ECS PFBSTH



BASE CASE

NO COGENERATION

PROCESS

MW- 52

PROCESS HEAT- 1333

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.133

CAPITAL COST- 77.5

LAEC - 58.764

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 84.0

LAEC - 42.986

ROI - 0

MW(GEN) - 100

FUEL - COAL-PFB

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

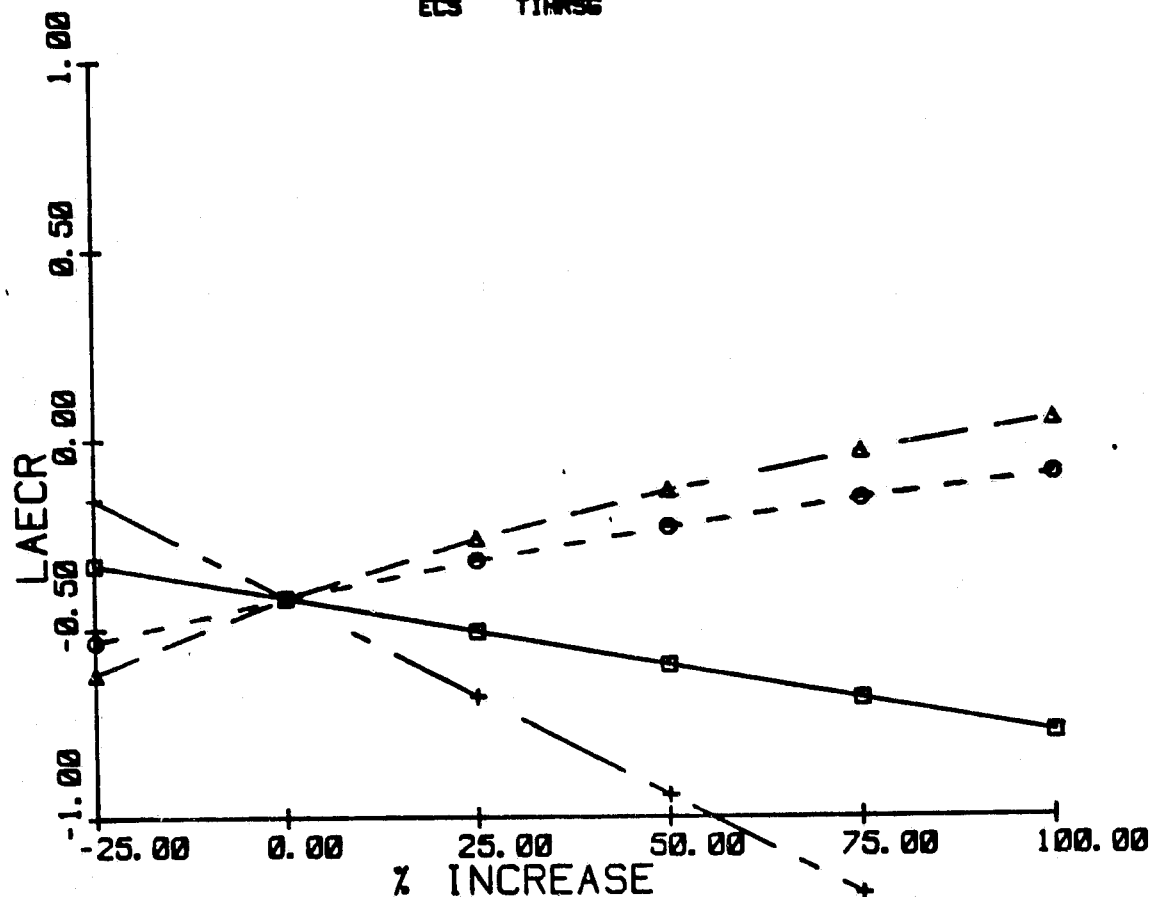
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 28112

ECS TIMRSG



BASE CASE
NO COGENERATION

PROCESS

MW- 52

PROCESS HEAT- 1333

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.133

CAPITAL COST- 77.5

LAEC - 58.784

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 100.0

LAEC - 63.436

ROI - 0

MW(GEN) - 52

FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - - - ELECTRIC POWER
- ▲— NO-CGN FUEL
- - - + - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/70

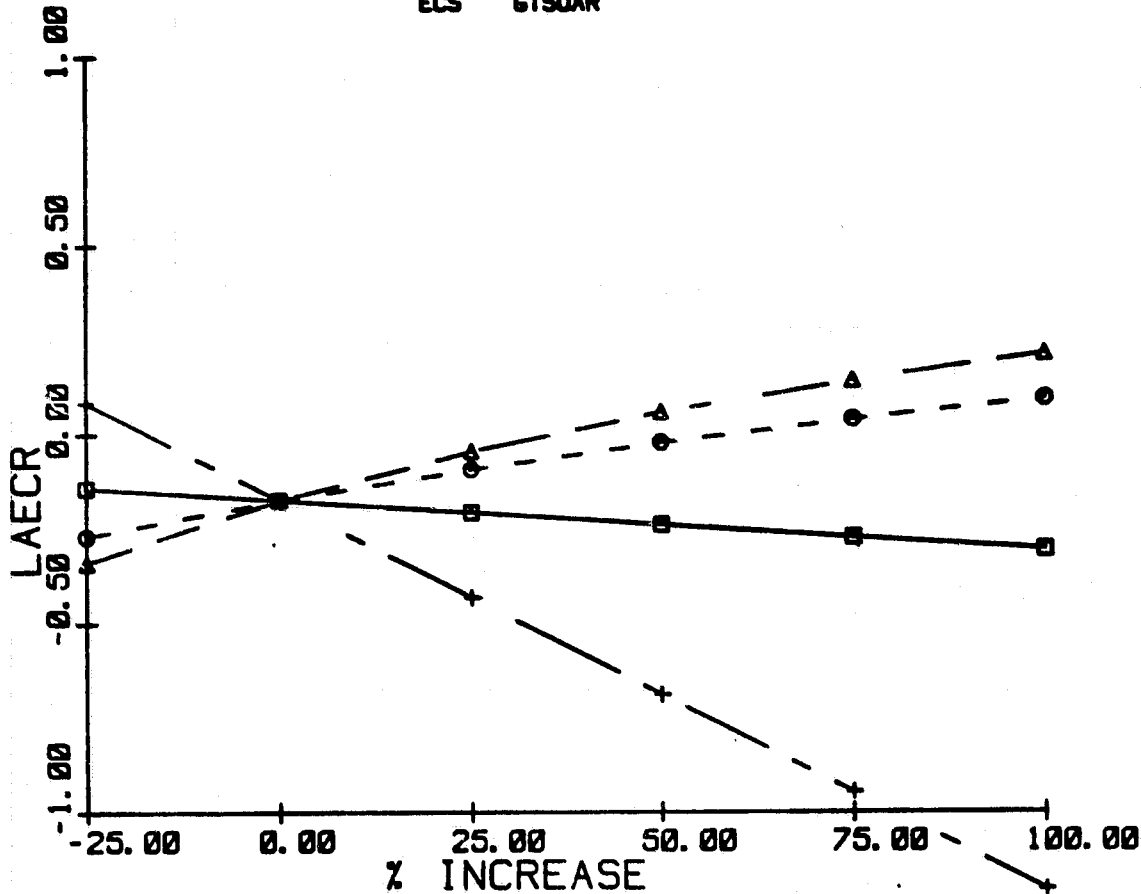
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20112

ECS GT90AR



BASE CASE

NO COGENERATION

PROCESS
MW- 52
PROCESS HEAT- 1333
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.133

CAPITAL COST- 77.5

LAEC - 58.764

FUEL - COAL-FGO

COGENERATION

CAPITAL COST- 58.3

LAEC - 69.854

ROI - 0

MW(GEN) - 52

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- — — — — NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

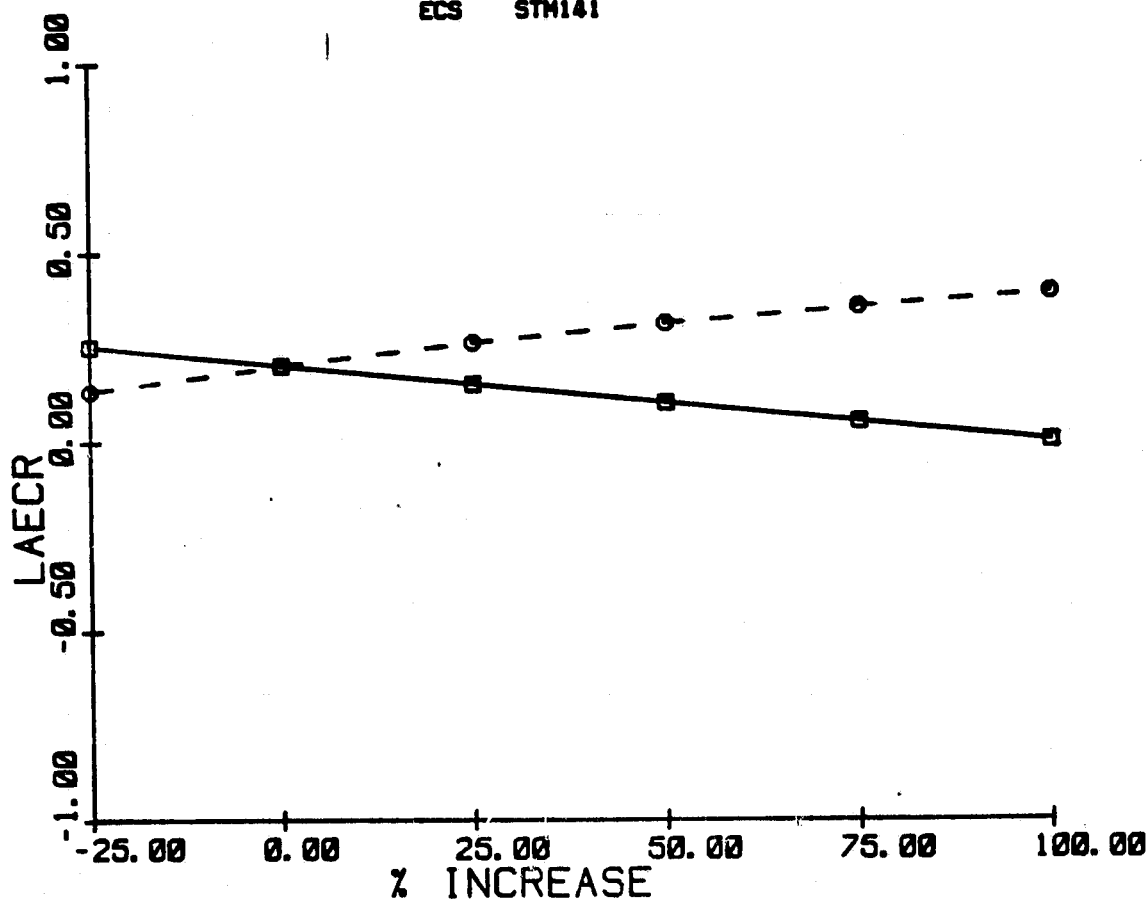
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20113

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 126
PROCESS HEAT- 3842
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.141

CAPITAL COST- 107.8
LAEC - 134.541
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 202.1
LAEC - 107.283
ROI - 0
MW(GEN) - 126
FUEL - COAL-FGD

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

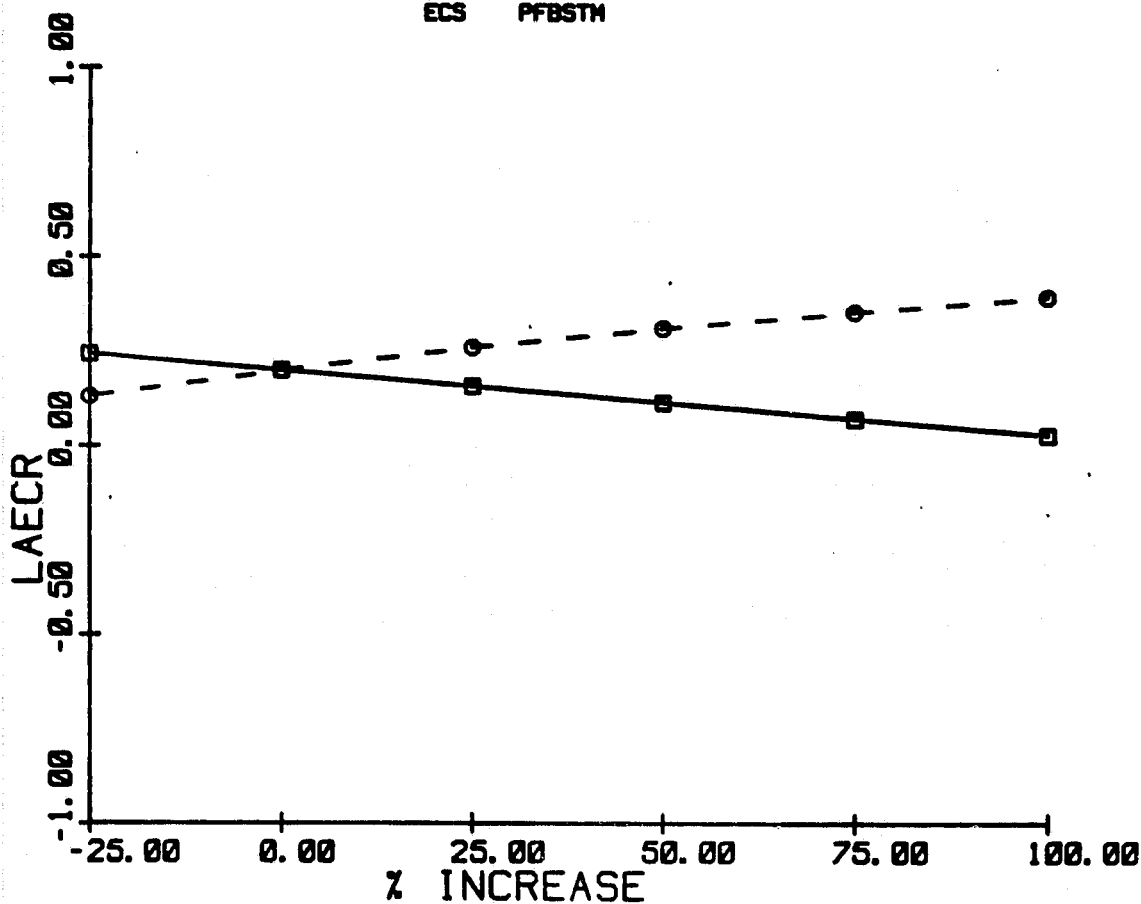
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 29113

ECS PFBSTM



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 3842
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.141

CAPITAL COST- 167.8
LAEC - 134.541
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 174.4
LAEC - 107.747
ROI - 0
MW(GEN) - 120
FUEL - COAL-PFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

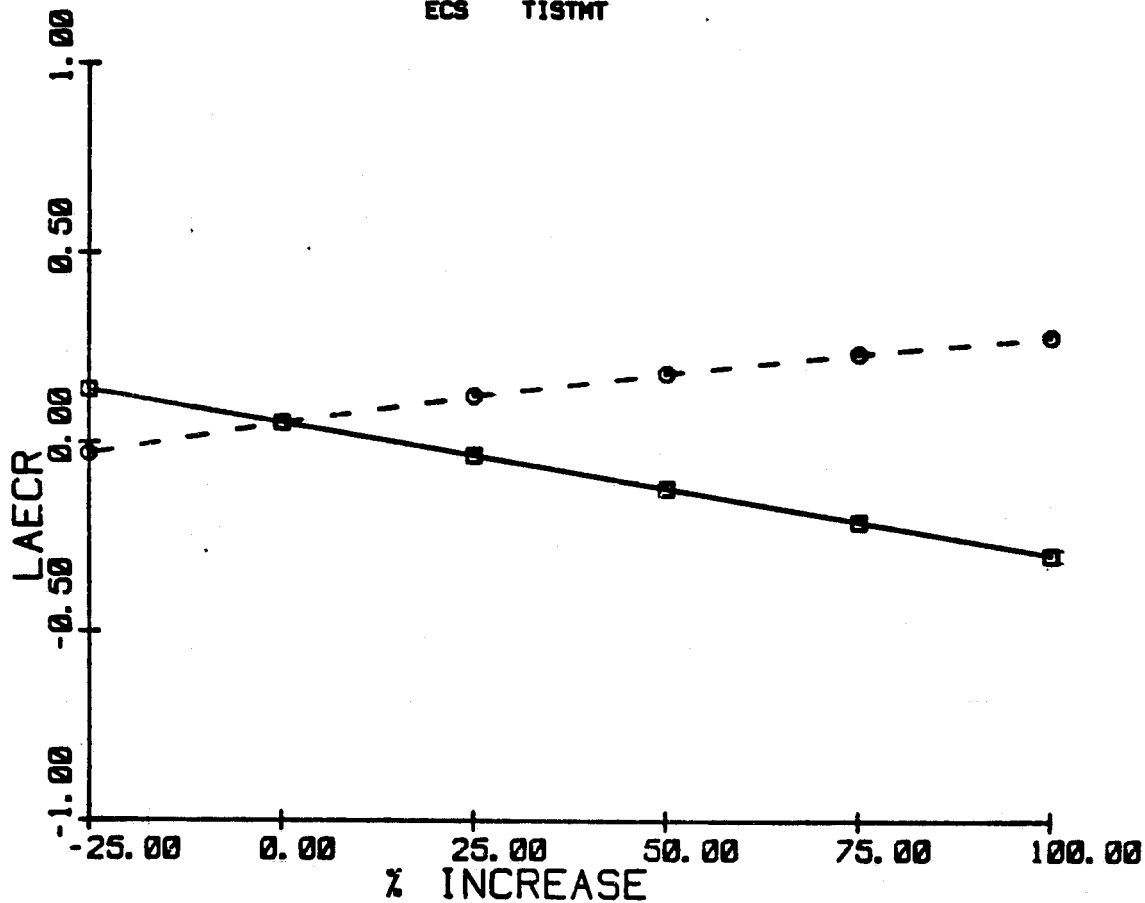
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 29113

ECS TISTMT



BASE CASE

NO COGENERATION

PROCESS

MW- 126

PROCESS HEAT- 3842

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.141

CAPITAL COST- 167.8

LAEC - 134.541

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 352.7

LAEC - 127.553

ROI - 0

MW(GEN) - 126

FUEL - COAL

[Solid line with square markers] CAPITAL COST
 [Dashed line with circle markers] ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

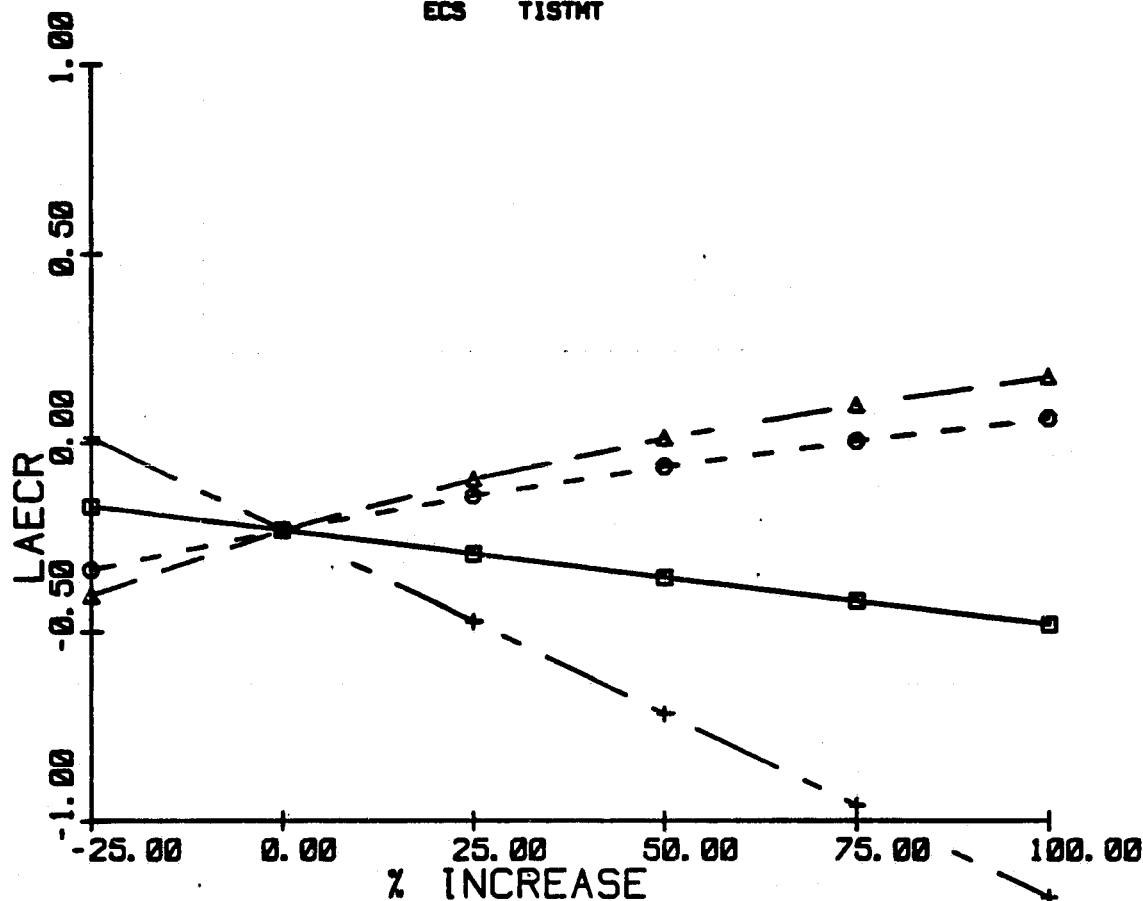
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 29113

ECS TISTMT



BASE CASE

NO COGENERATION

PROCESS
MW- 120
PROCESS HEAT- 3042
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.141

CAPITAL COST- 167.0
LAEC - 134.541
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 251.0
LAEC - 165.500
ROI - 0
MW(GEN) - 120
FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- ▲— NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

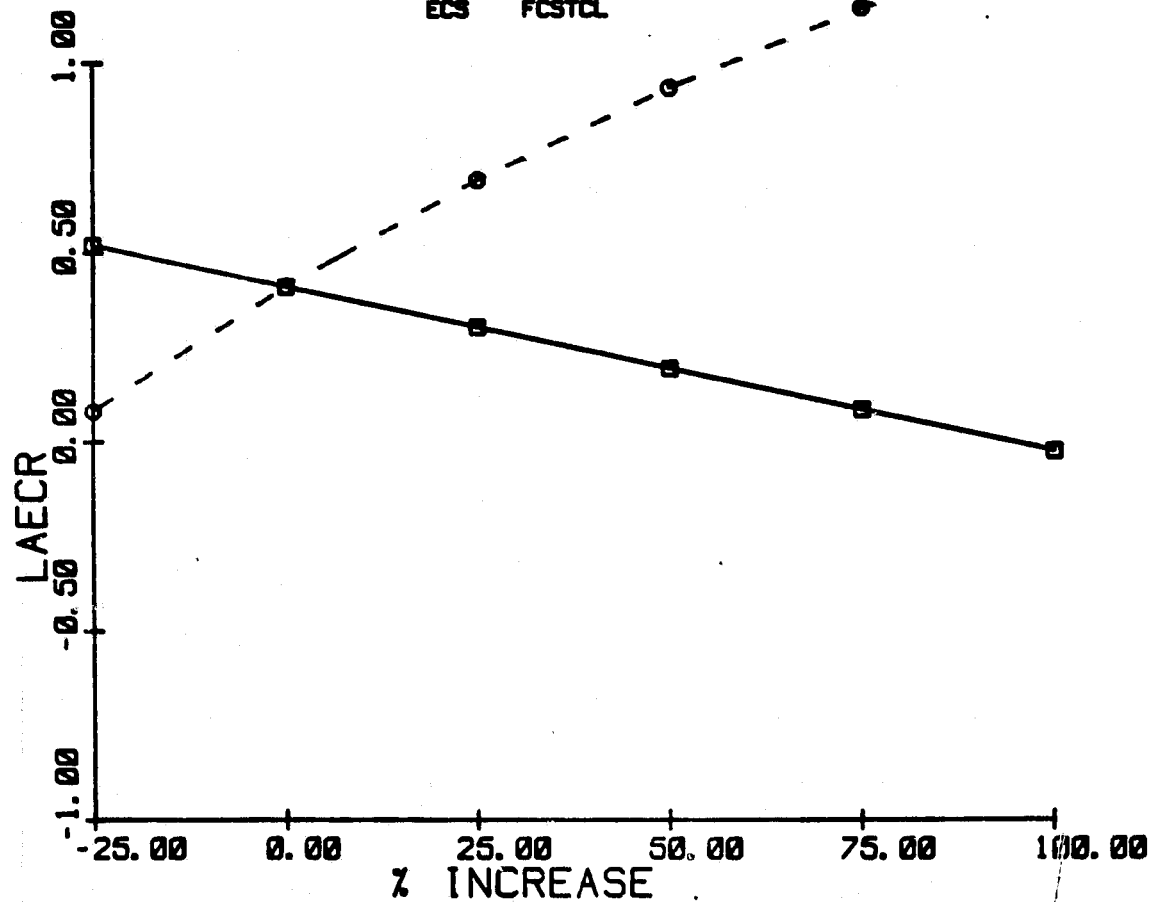
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20113

ECS FCSTCL



BASE CASE

NO COGENERATION

PROCESS
MW- 126
PROCESS HEAT- 3842
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.141

CAPITAL COST- 167.8
LAEC - 134.541
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 438.9
LAEC - 79.144
ROI - 0
MW(GEN) - 888
FUEL - COAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

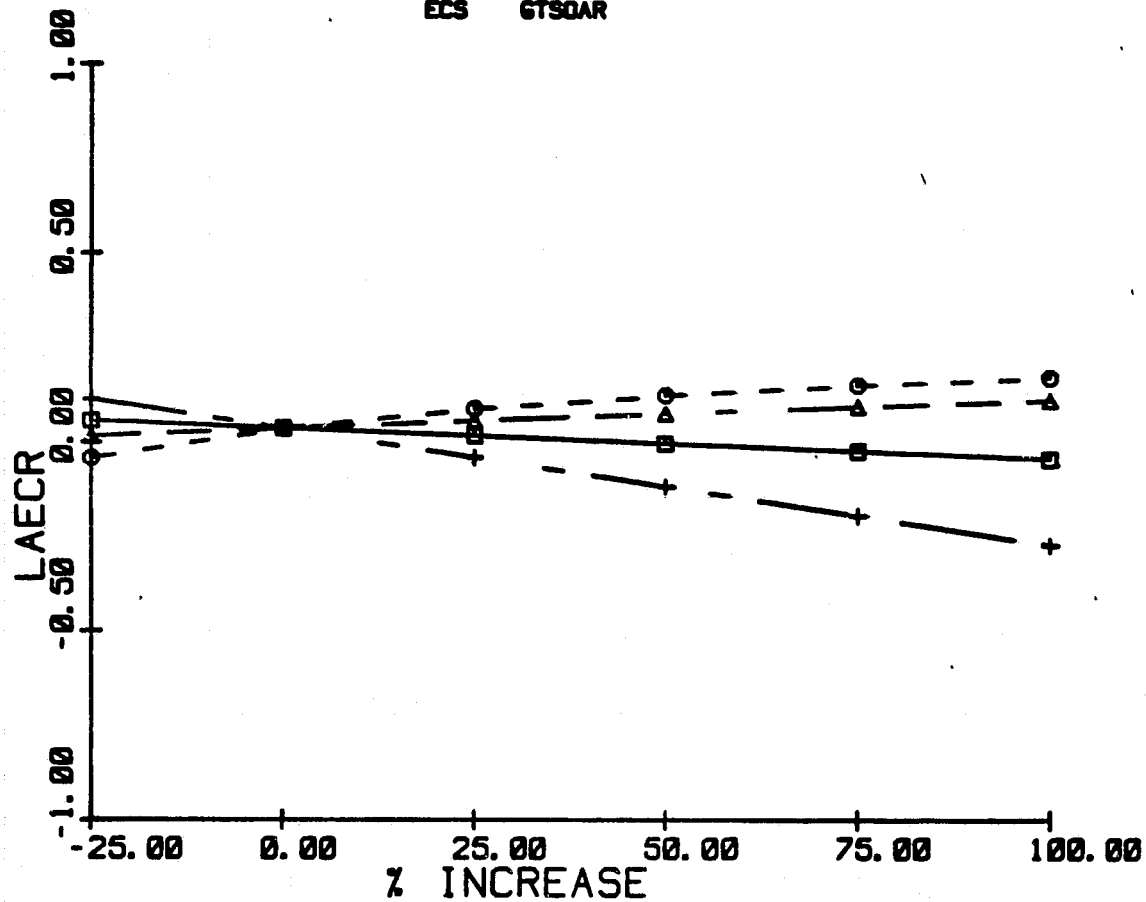
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33121

ECS GTSOAR



BASE CASE

NO COGENERATION

PROCESS

MW- 88

PROCESS HEAT- 93

(BTU*10**6)

WASTE FUEL- 8

(BTU*10**6)

POWER/HEAT- 2.201

CAPITAL COST- 7.4

LAEC - 18.473

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 11.4

LAEC - 17.818

ROI - 8

MW(GEN) - 28

FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- ▲— NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/70

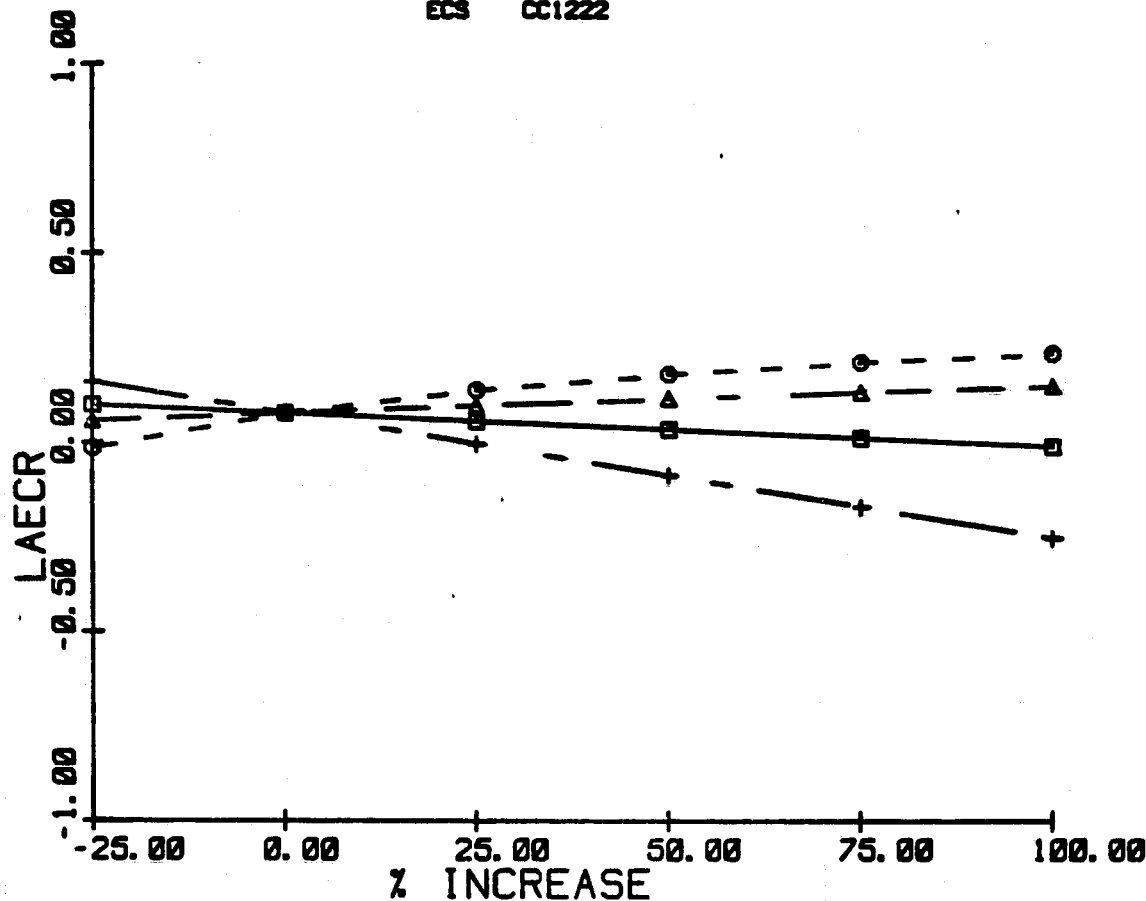
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33121

ECS CC1222



BASE CASE

NO COGENERATION

PROCESS
MW- 60
PROCESS HEAT- 93
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 2.201

CAPITAL COST- 7.4
LAEC - 16.473
FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 12.2
LAEC - 17.053
ROI - 0
MW(GEN) - 25
FUEL - RESIDUAL

— — — CAPITAL COST
- - - - - ELECTRIC POWER
— — — NO-CGN FUEL
+ - - + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

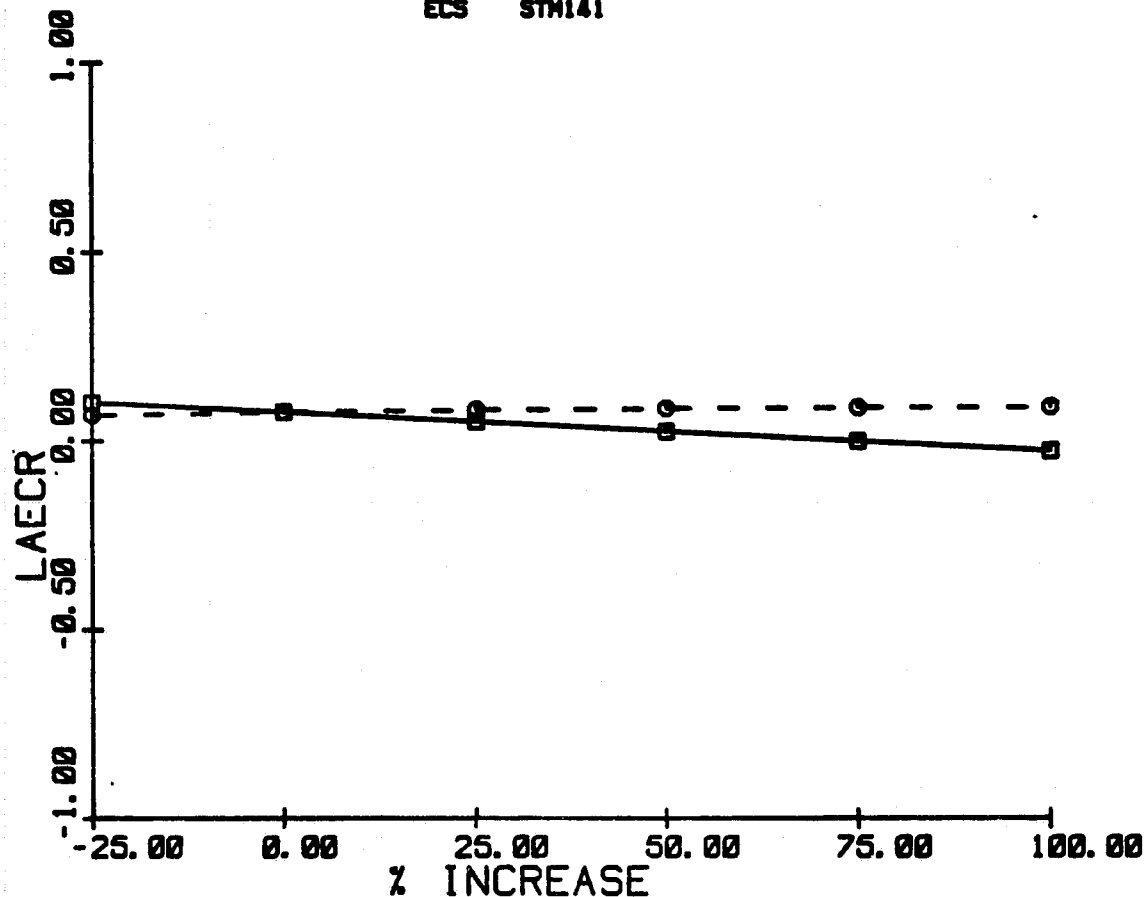
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33251

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 200

PROCESS HEAT- 912

(BTU*10**6)

WASTE FUEL- 1192

(BTU*10**6)

POWER/HEAT- 1.040

CAPITAL COST- 53.1

LAEC - 88.595

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 62.1

LAEC - 74.420

ROI - 0

MW(GEN) - 30

FUEL - COAL-FGD

————■ CAPITAL COST
 - - - - -○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

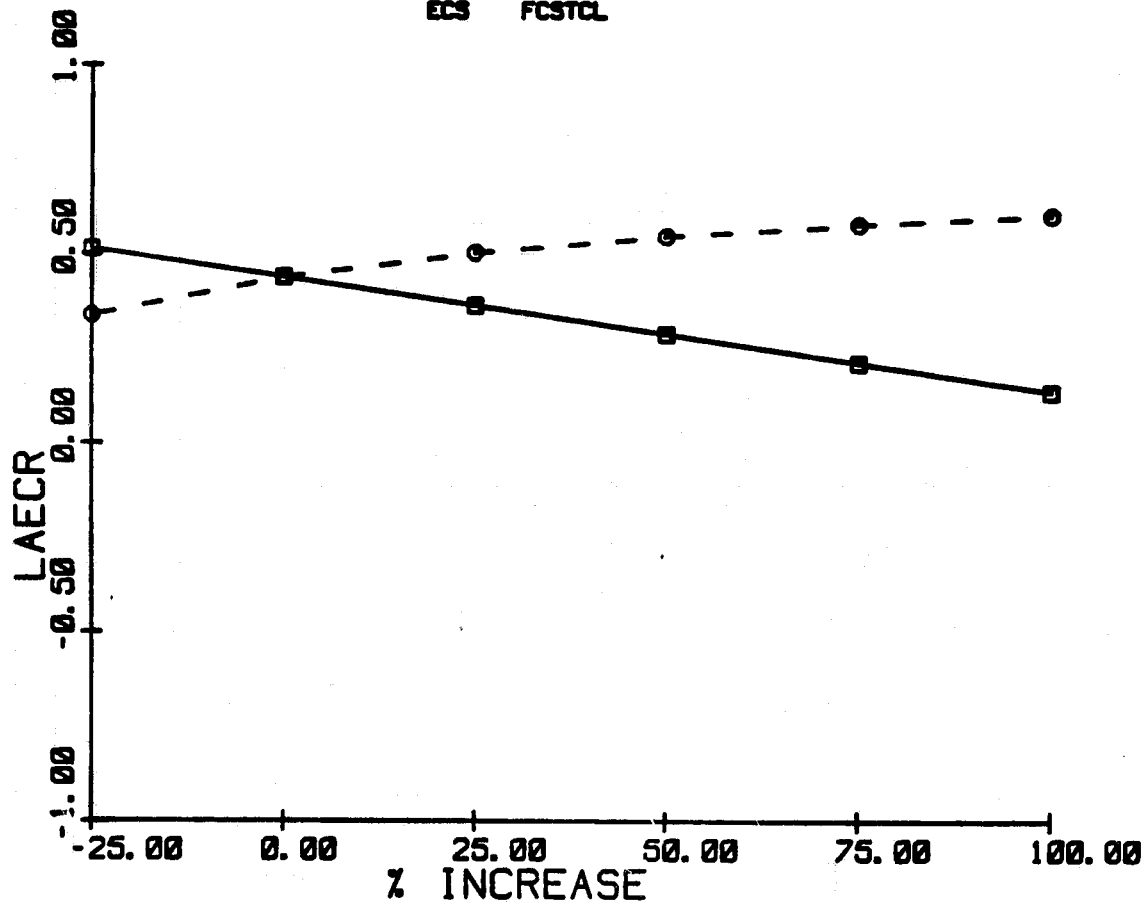
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33251

ECS FCSTCL



BASE CASE

NO COGENERATION

PROCESS
MW- 200
PROCESS HEAT- 912
(BTU*10**6)
WASTE FUEL- 2110
(BTU*10**6)
POWER/HEAT- 1.048

CAPITAL COST- 53.1
LAEC - 68.505
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 170.1
LAEC - 45.310
ROI - 0
MW(GEN) - 220
FUEL - COAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

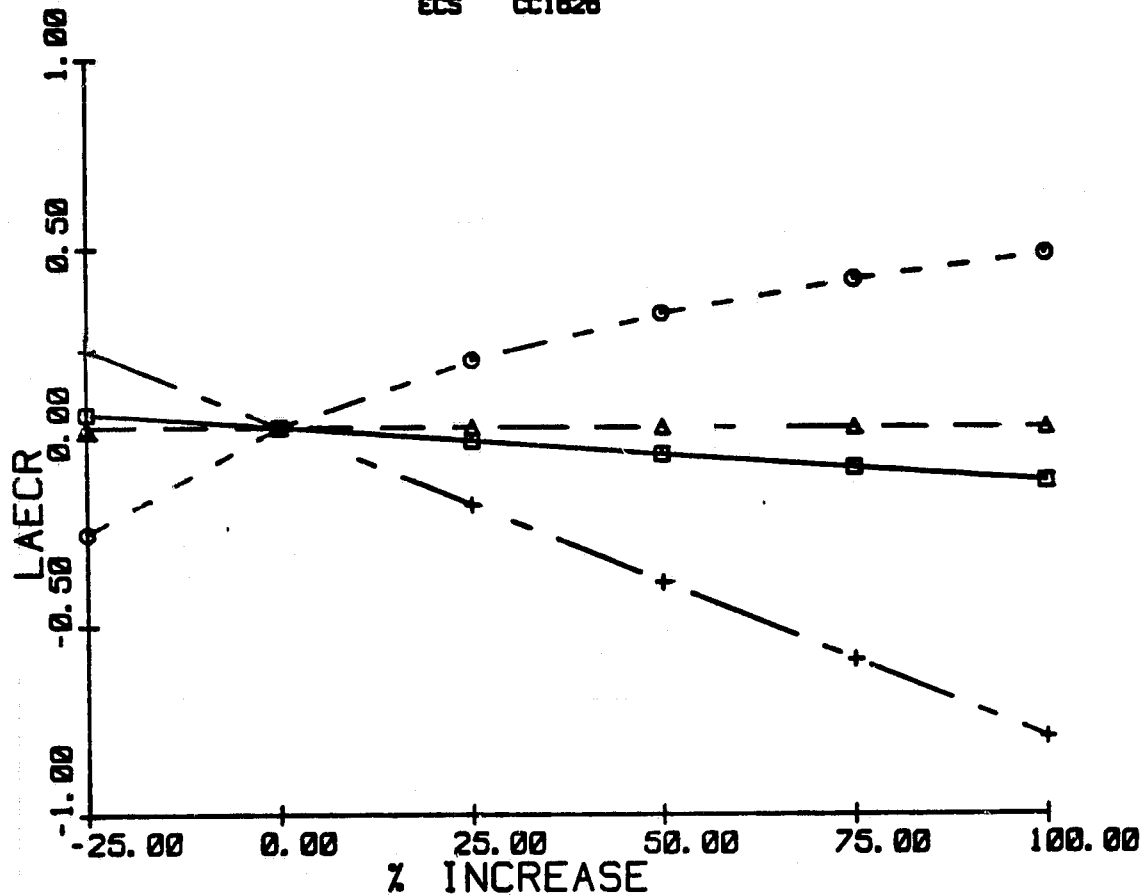
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33251

ECS CC1828



BASE CASE

NO COGENERATION

PROCESS

MW- 280

PROCESS HEAT- 912

(BTU*10**6)

WASTE FUEL- 4

(BTU*10**6)

POWER/HEAT- 1.048

CAPITAL COST- 53.1

LAEC - 88.595

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 88.4

LAEC - 78.588

ROI - 8

MW(GEN) - 280

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

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GENERAL ELECTRIC COMPANY

DATE 84/11/79

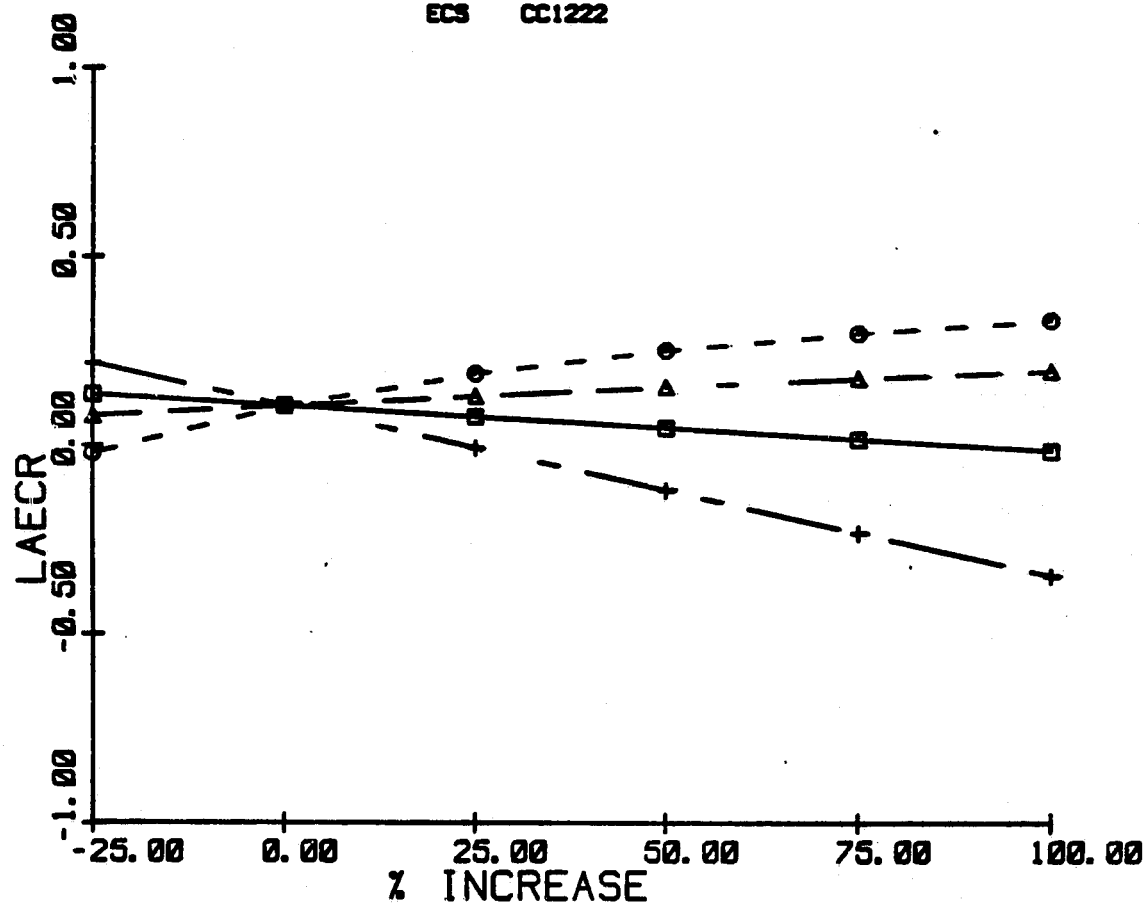
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33254

ECS CC1222



BASE CASE

NO COGENERATION

PROCESS

MW- 40

PROCESS HEAT- 91

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.500

CAPITAL COST- 7.3

LAEC - 13.265

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 12.0

LAEC - 11.075

ROI - 0

MW(GEN) - 25

FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- - - - - NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

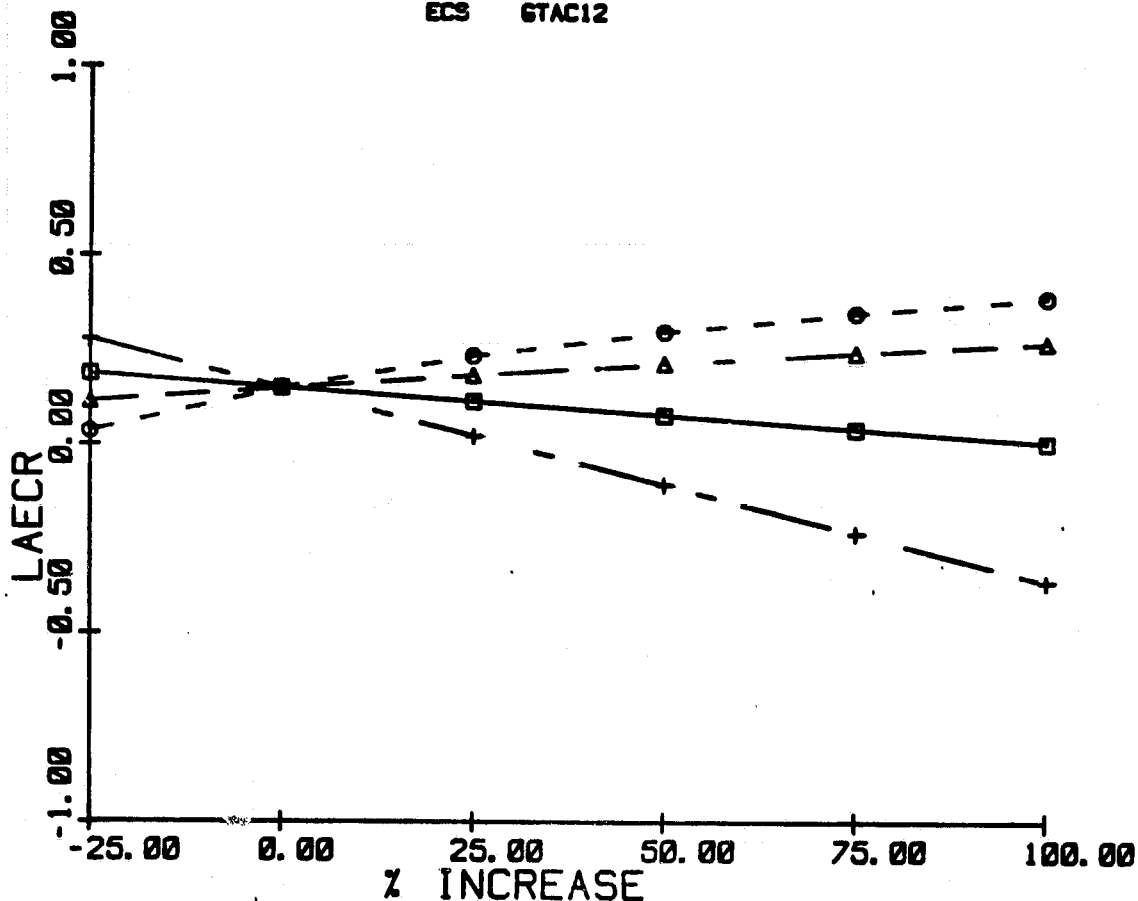
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33314

ECS GTAC12



BASE CASE

NO COGENERATION

PROCESS
MW- 10
PROCESS HEAT- 40
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.062

CAPITAL COST- 4.0
LAEC - 4.063
FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 5.2
LAEC - 3.963
ROI - 0
MW(GEN) - 0
FUEL - RESIDUAL

- — — — — CAPITAL COST
- - - - - ELECTRIC POWER
- — — — — NO-CGN FUEL
- - - - - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

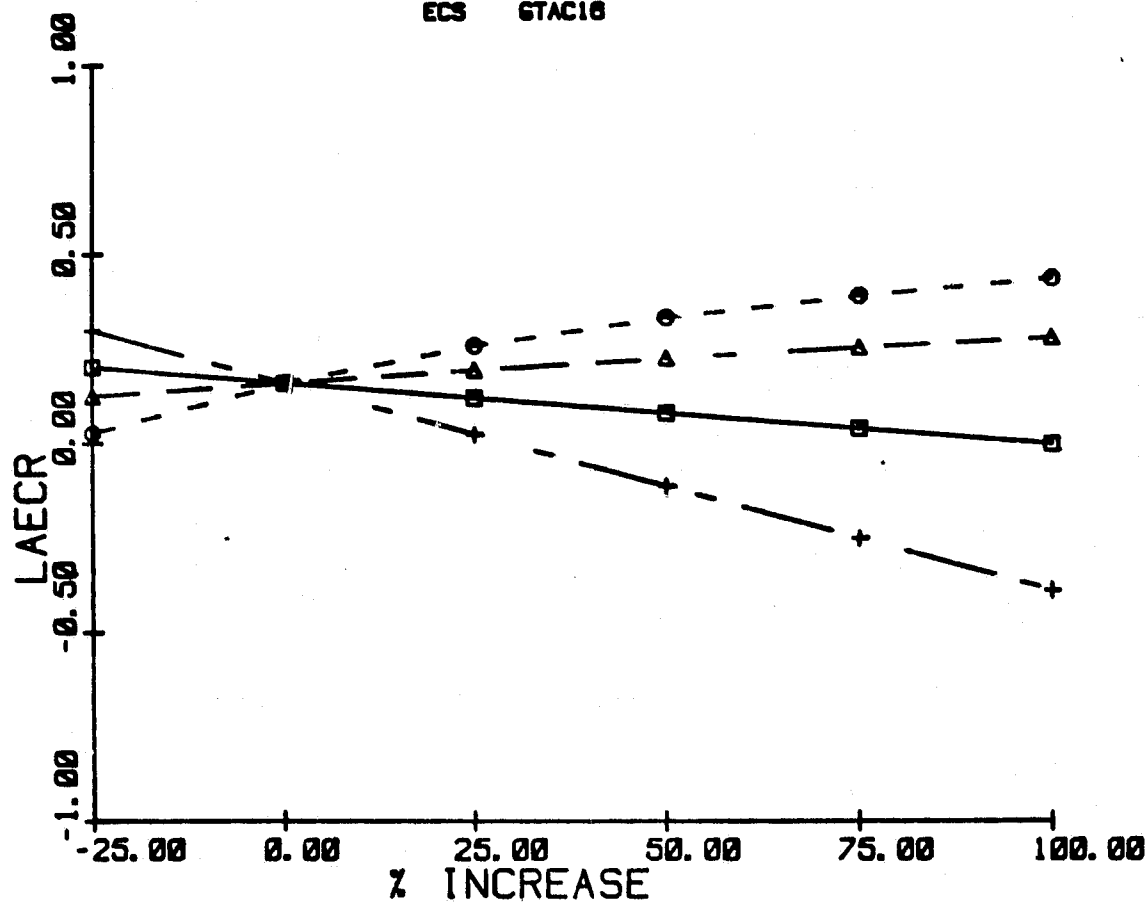
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33314

ECS GTAC16



BASE CASE

NO COGENERATION

PROCESS

MW- 10

PROCESS HEAT- 40

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.002

CAPITAL COST- 4.0

LAEC -4.003

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 5.0

LAEC -3.910

ROI -0

MW(GEN) -0

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

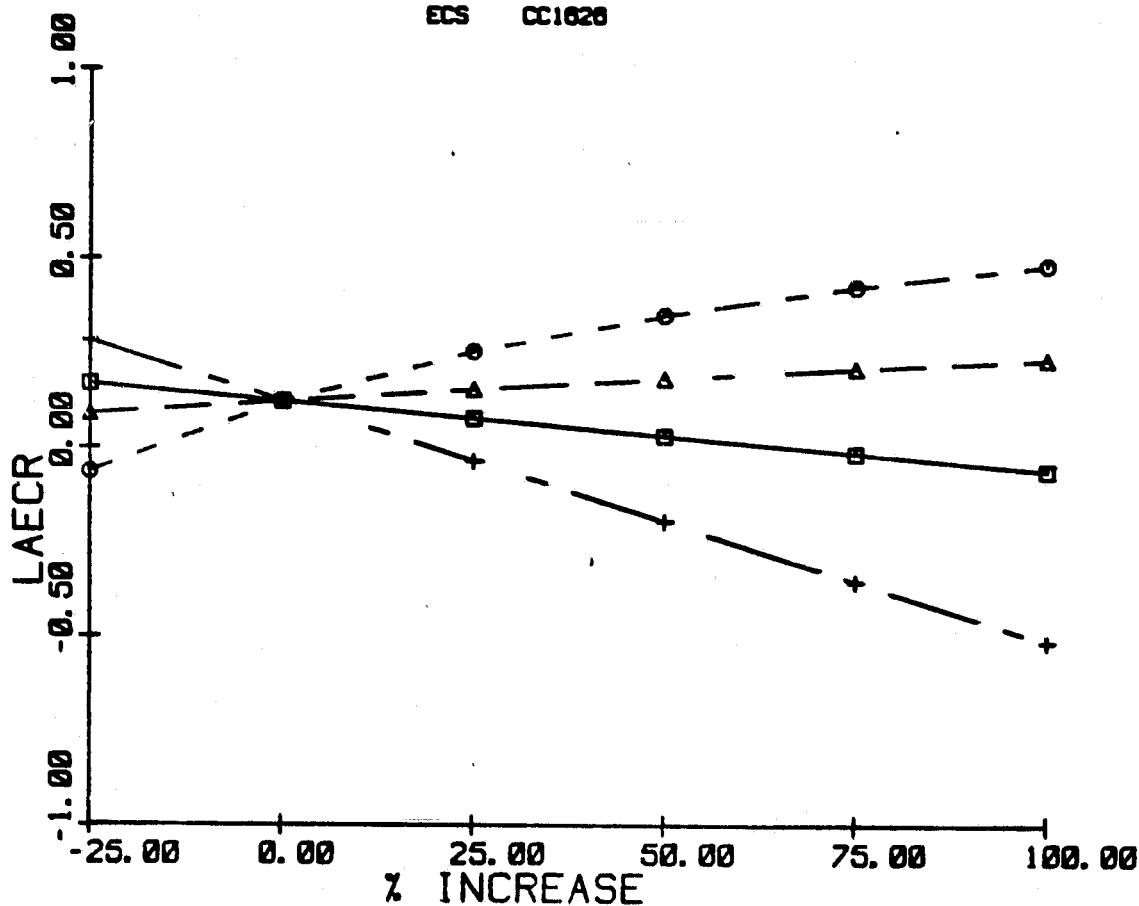
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33315

ECS CC1626



BASE CASE

NO COGENERATION

PROCESS
MW- 10
PROCESS HEAT- 60
(BTU=10**6)
WASTE FUEL- 0
(BTU=10**6)
POWER/HEAT- 1.052

CAPITAL COST- 5.7
LAEC - 7.723
FUEL - COAL-AFB

COGENERATION

CAPITAL COSY- 10.0
LAEC - 6.776
ROI - 0
MW(GEN) - 10
FUEL - RESIDUAL

□ — — — □ CAPITAL COST
 ○ — — — ○ ELECTRIC POWER
 ▲ — — — ▲ NO-CGN FUEL
 + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

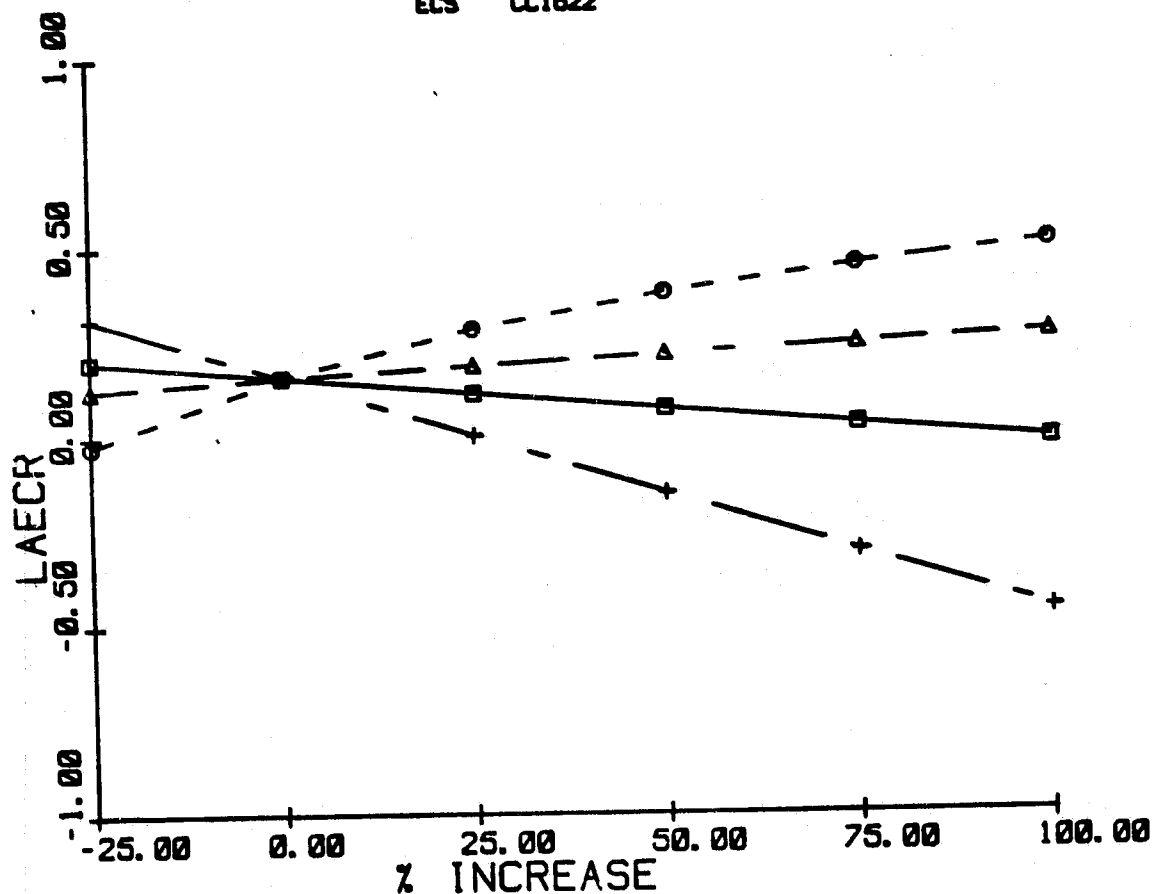
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33315

ECS CC1622



BASE CASE
NO COGENERATION

PROCESS

MW- 19

PROCESS HEAT- 60

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.852

CAPITAL COST- 5.7

LAEC -7.723

FUEL - COAL-AFB

COGENERATION

CAPITAL COST- 10.1

LAEC -6.519

ROI -8

MW(GEN) -19

FUEL - RESIDUAL

- — — — — CAPITAL COST
- — — — — ELECTRIC POWER
- — — — — NO-CGN FUEL
- — — — — ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

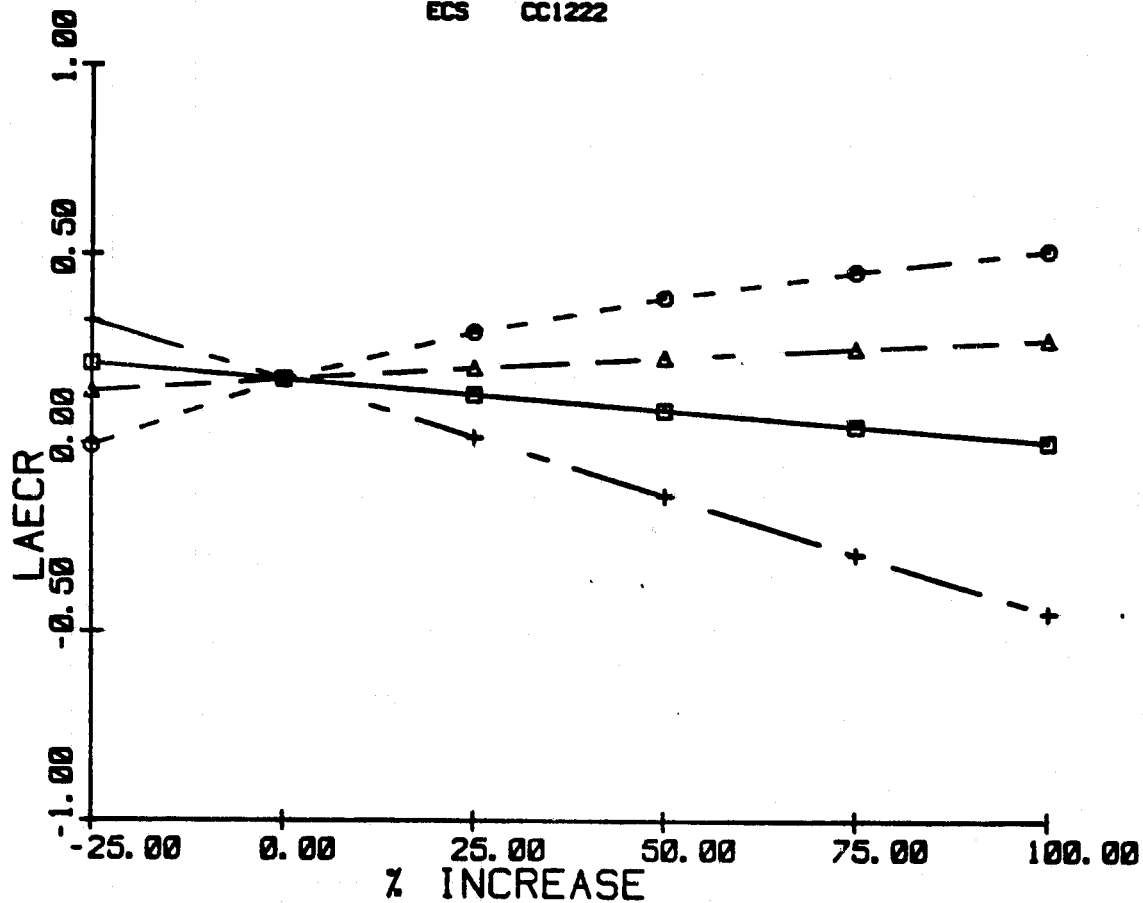
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33315

ECS CC1222



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 10		
PROCESS HEAT- 60		CAPITAL COST- 9.6
(BTU*10**6)	CAPITAL COST- 5.7	LAEC - 6.419
WASTE FUEL- 0	LAEC - 7.723	ROI - 0
(BTU*10**6)	FUEL - COAL-AFB	MW(GEN) - 10
POWER/HEAT- 1.052		FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- △— NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

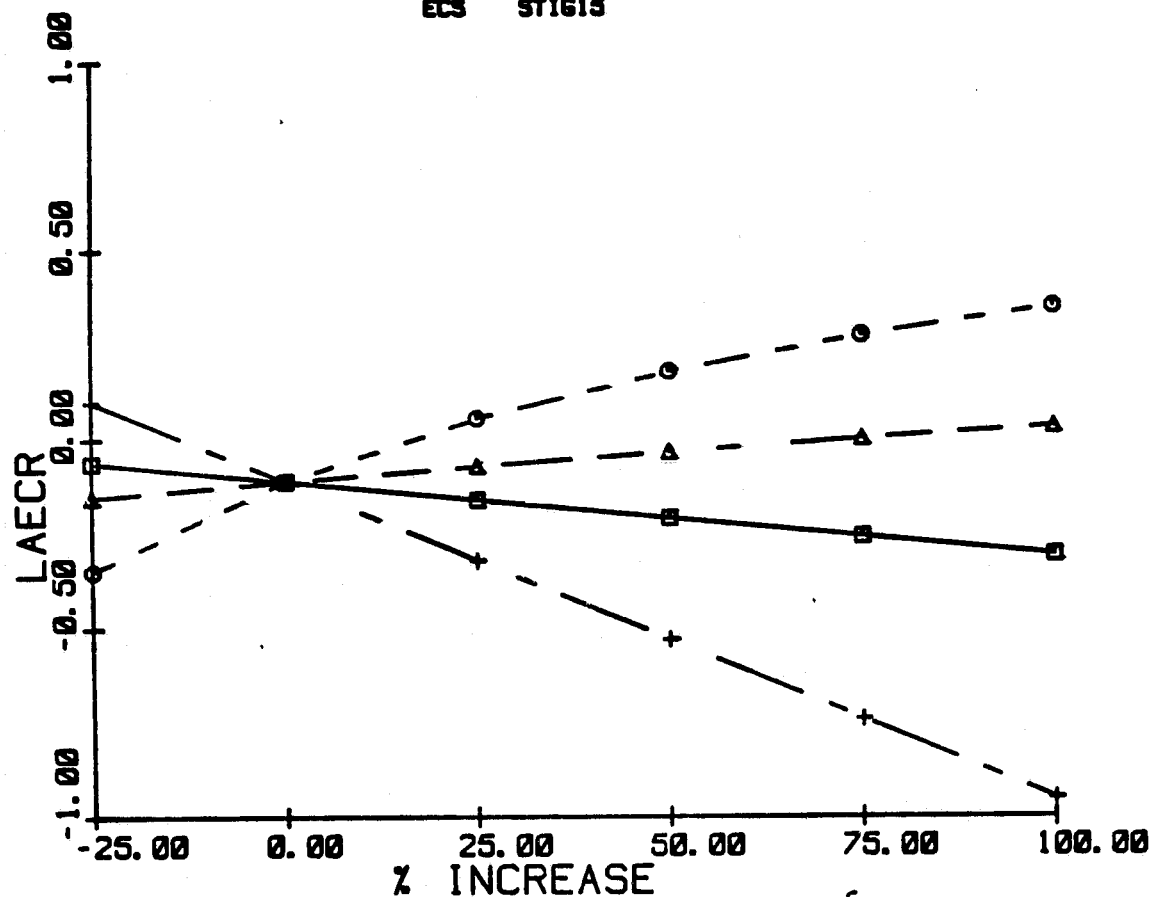
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33315

ECS ST1615



BASE CASE

NO COGENERATION

PROCESS

MW- 10

PROCESS HEAT- 80

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 1.052

CAPITAL COST- 5.7

LAEC - 7.723

FUEL - COAL- AFB

COGENERATION

CAPITAL COST- 11.0

LAEC - 0.585

ROI - 0

MW(GEN) - 10

FUEL - RESIDUAL

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- - - △ - NO-CGN FUEL
- - - + - ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/11/79

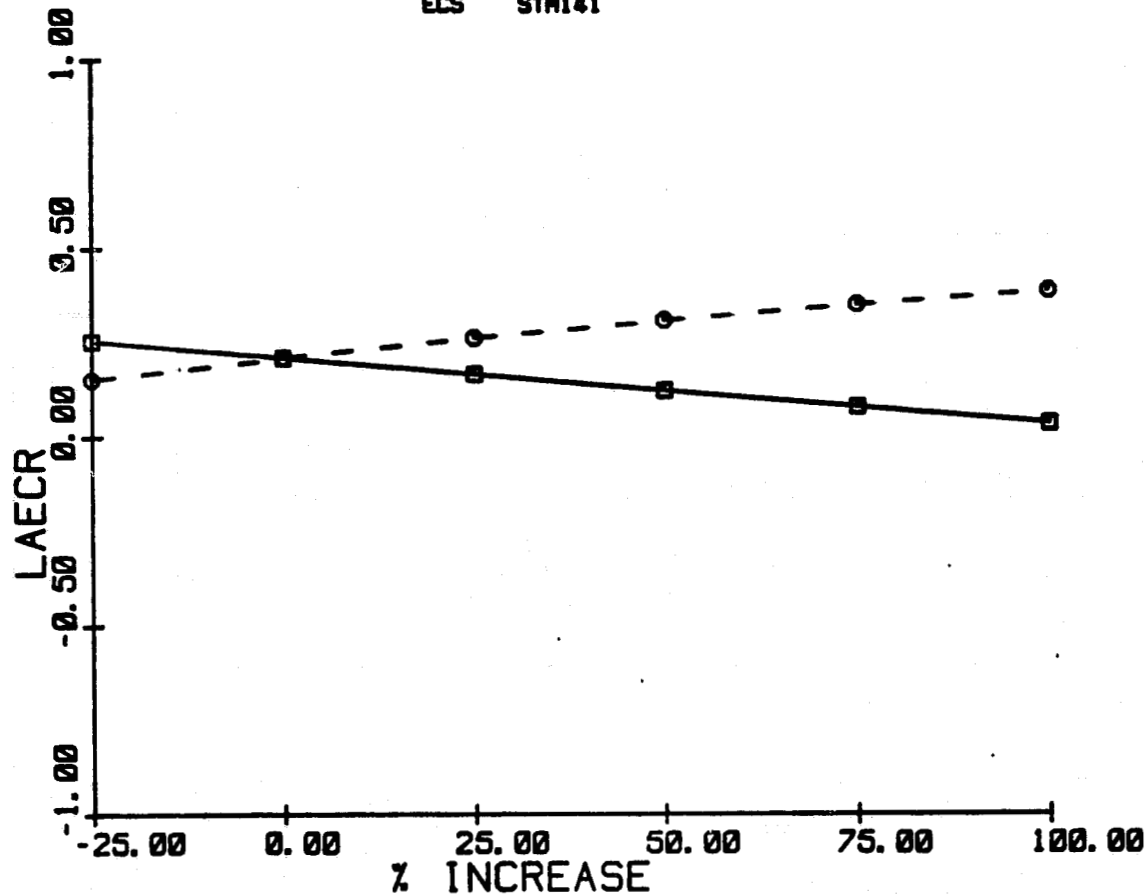
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33344

ECS STM141



BASE CASE

NO COGENERATION

PROCESS
MW- 30
PROCESS HEAT- 900
(BTU*10**6)
WASTE FUEL- 0
(BTU*10**6)
POWER/HEAT- 0.105

CAPITAL COST- 55.7
LAEC - 30.211
FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 50.7
LAEC - 30.198
ROI - 0
MW(GEN) - 35
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

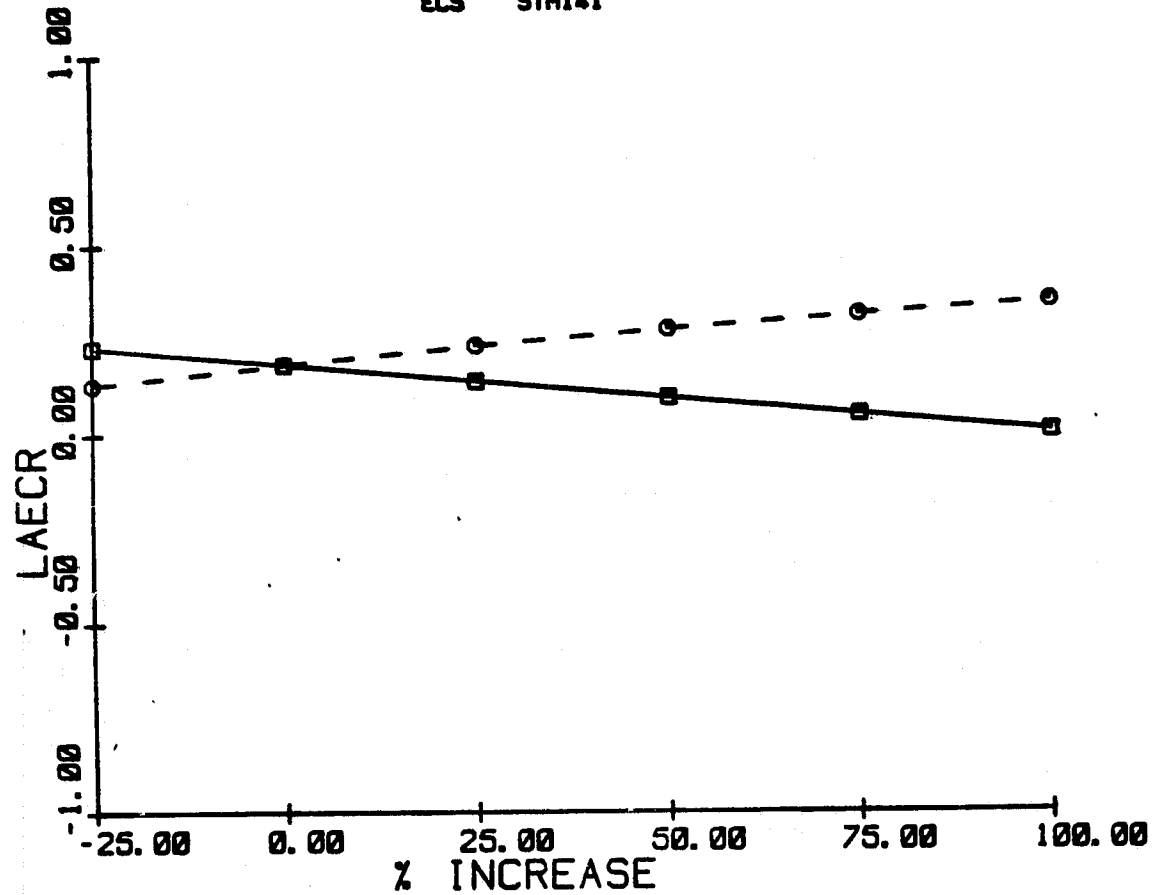
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33344

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 30

PROCESS HEAT- 900

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.105

CAPITAL COST- 55.7

LAEC - 30.211

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 51.0

LAEC - 31.152

ROI - 0

MW(GEN) - 30

FUEL - COAL-AFB

———— □ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 84/11/79

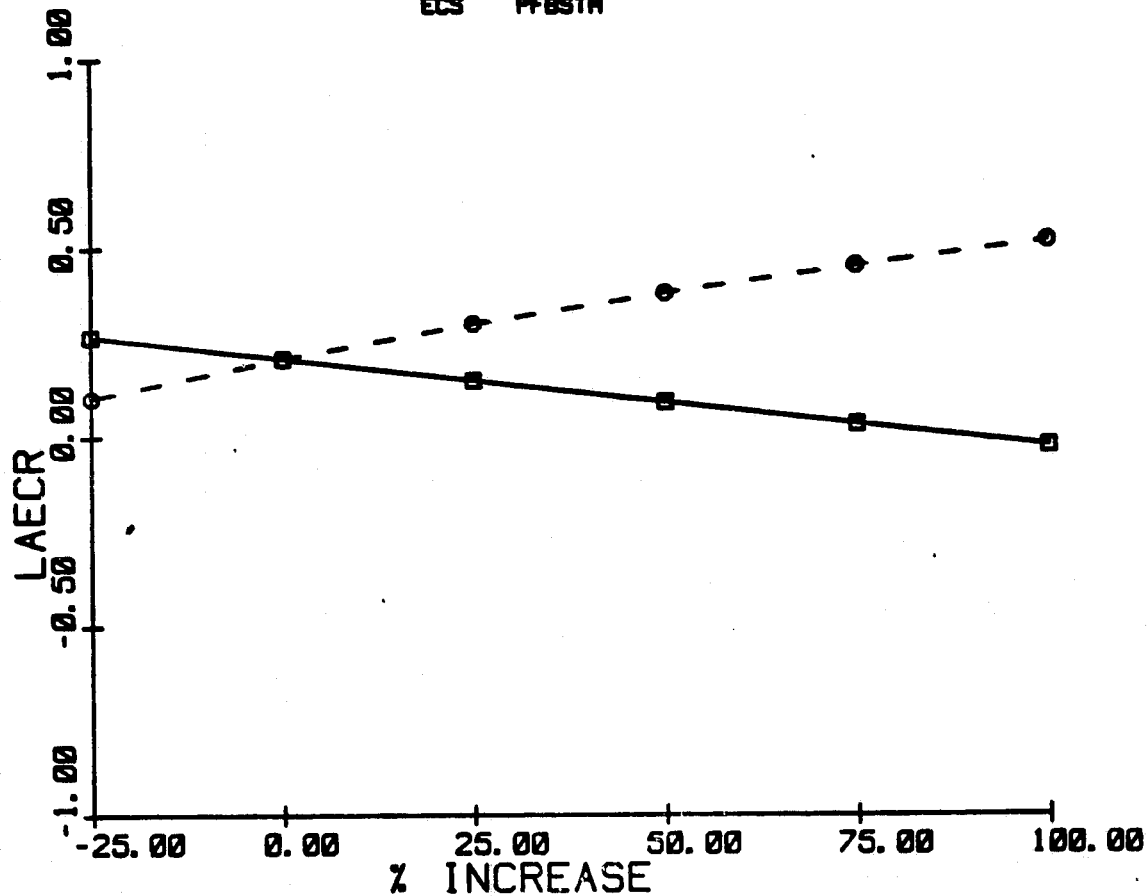
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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 33344

ECS PFBSTM



BASE CASE

NO COGENERATION

PROCESS

MW- 30

PROCESS HEAT- 900

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.105

— CAPITAL COST

- - - - - ELECTRIC POWER

NO-CGN FUEL

ECS FUEL

COGENERATION

CAPITAL COST- 65.7

LAEC - 38.387

ROI - 8

MW(GEN) - 70

FUEL - COAL-PFB

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GENERAL ELECTRIC COMPANY

DATE 04/16/79

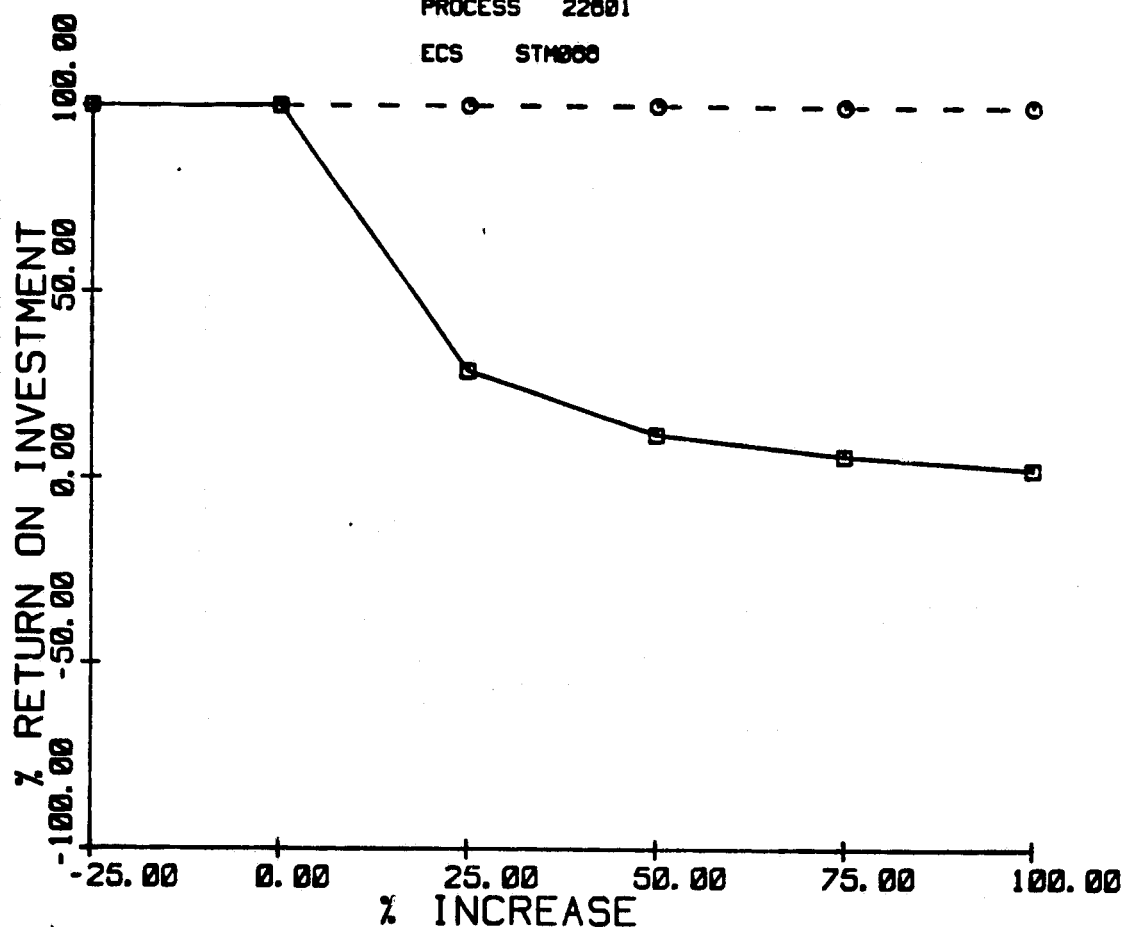
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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SENSITIVITY STUDY

PROCESS 22001

ECS STM000



BASE CASE

NO COGENERATION

PROCESS

MW- 0

PROCESS HEAT- 150

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.134

CAPITAL COST- 13.5

LAEC - 6.265

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 12.4

LAEC - 4.954

ROI - 000

MW(GEN) - 7

FUEL - COAL-AFB

—■— CAPITAL COST

- - - ○ - ELECTRIC POWER

NO-CGN FUEL

ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/16/70

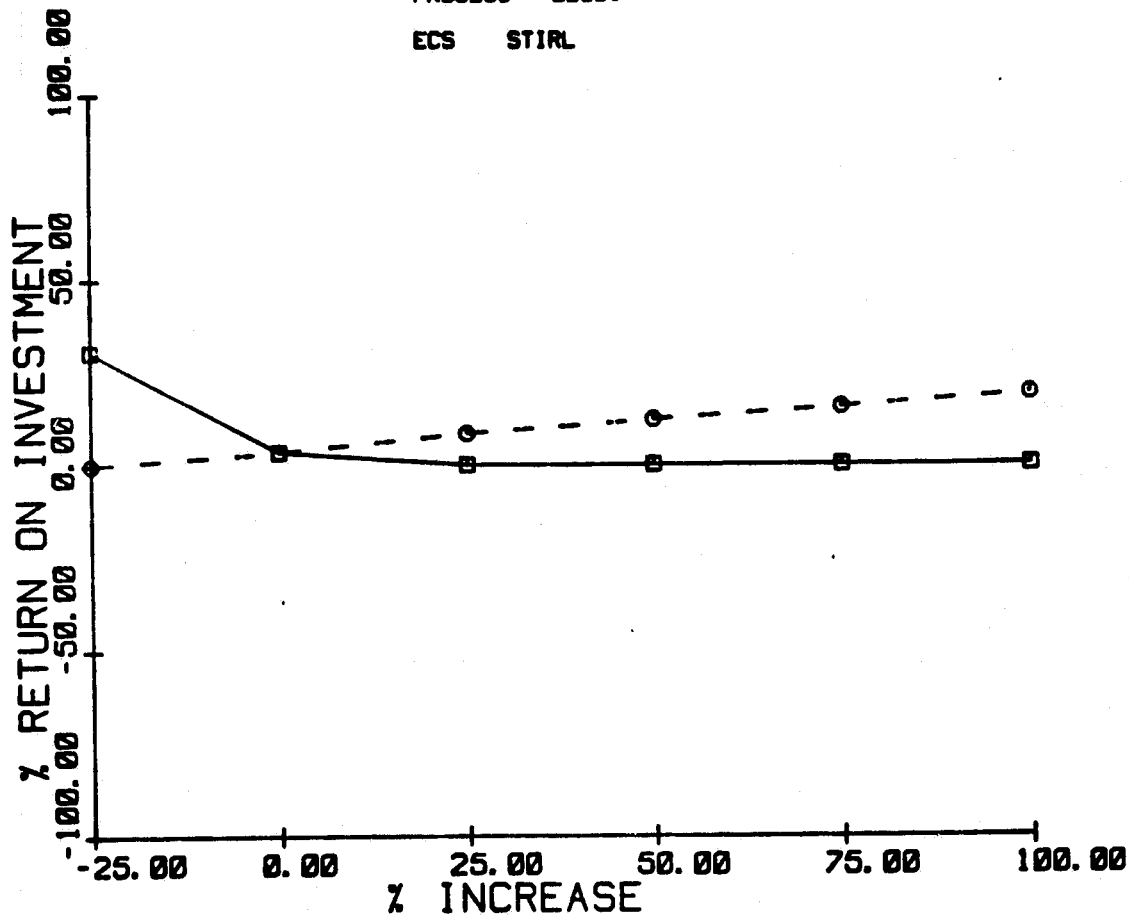
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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SENSITIVITY STUDY

PROCESS 22001

ECS STIRL



BASE CASE

NO COGENERATION

PROCESS

MW- 6

PROCESS HEAT- 150

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.134

□ — — — □

CAPITAL COST

○ — — — ○

ELECTRIC POWER

NO-CGN FUEL

ECS FUEL

CAPITAL COST- 13.5

LAEC - 6.285

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 19.9

LAEC - 6.363

ROI - 3

MW(GEN) - 6

FUEL - COAL

GENERAL ELECTRIC COMPANY

DATE 04/10/79

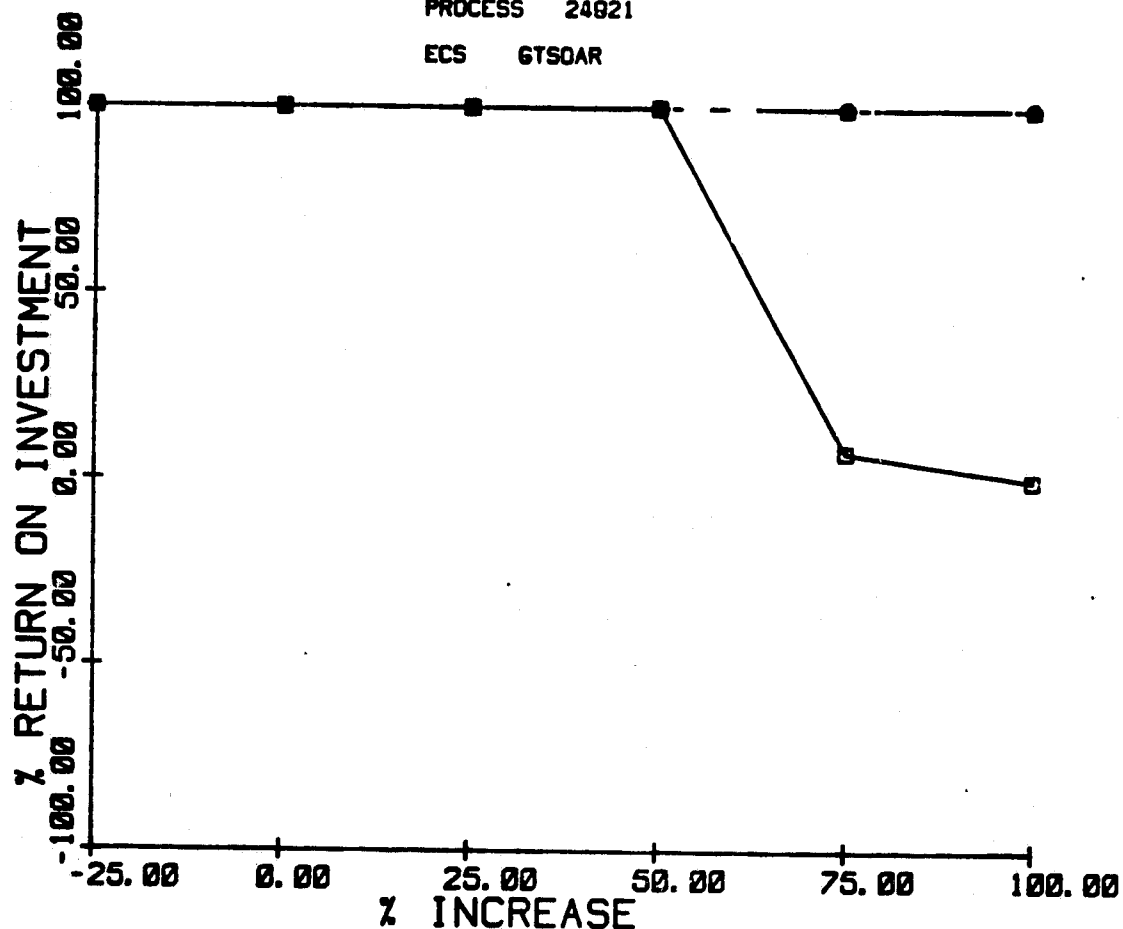
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 24921

ECS GTSOAR



BASE CASE

NO COGENERATION

COGENERATION

PROCESS

MW- 5

PROCESS HEAT- 37

(BTU*10**6)

WASTE FUEL- 41

(BTU*10**6)

POWER/HEAT- 0.481

CAPITAL COST- 4.4

LAEC - 2.488

FUEL - COAL-AFB

CAPITAL COST- 3.8

LAEC - 2.188

ROI - 999

MW(GEN) - 8

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/10/70

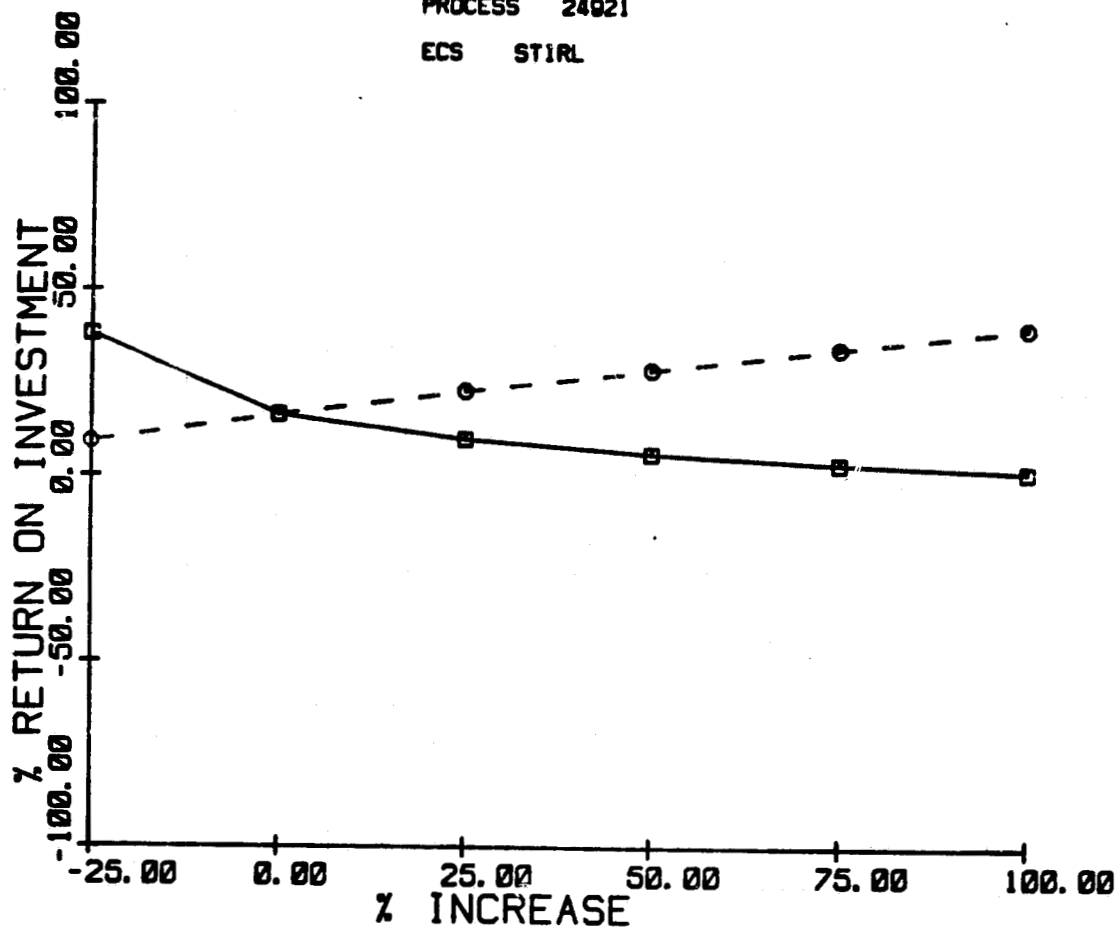
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

Page 204

PROCESS 24921

ECS STIRL



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 5
PROCESS HEAT- 37
(BTU*10**6)
WASTE FUEL- 41
(BTU*10**6)
POWER/HEAT- 0.401

CAPITAL COST- 4.4
LAEC - 2.400
FUEL - COAL-AFB

CAPITAL COST- 7.7
LAEC - 1.900
ROI - 10
MW(GEN) - 5
FUEL - COAL

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/16/79

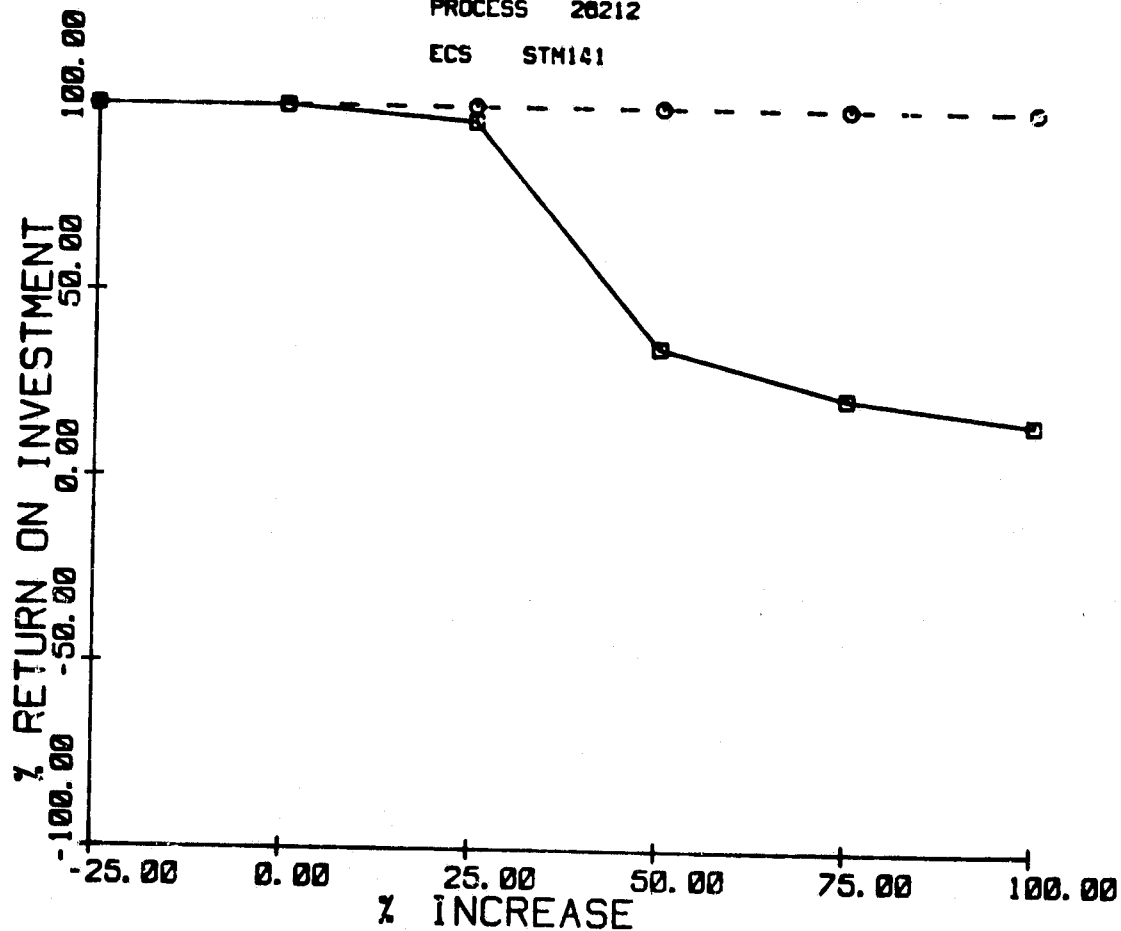
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

Page 205

PROCESS 28212

ECS STM141



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 50
PROCESS HEAT- 700
(BTU*10**6)
WASTE FUEL- 353
(BTU*10**6)
POWER/HEAT- 0.210

CAPITAL COST- 47.9
LAEC - 33.876
FUEL - COAL-F60

CAPITAL COST- 42.8
LAEC - 21.832
ROI - 999
MW(GEN) - 47
FUEL - COAL-AFB

—■— CAPITAL COST
- - - ○ - ELECTRIC POWER
NO-CGN FUEL
ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/79

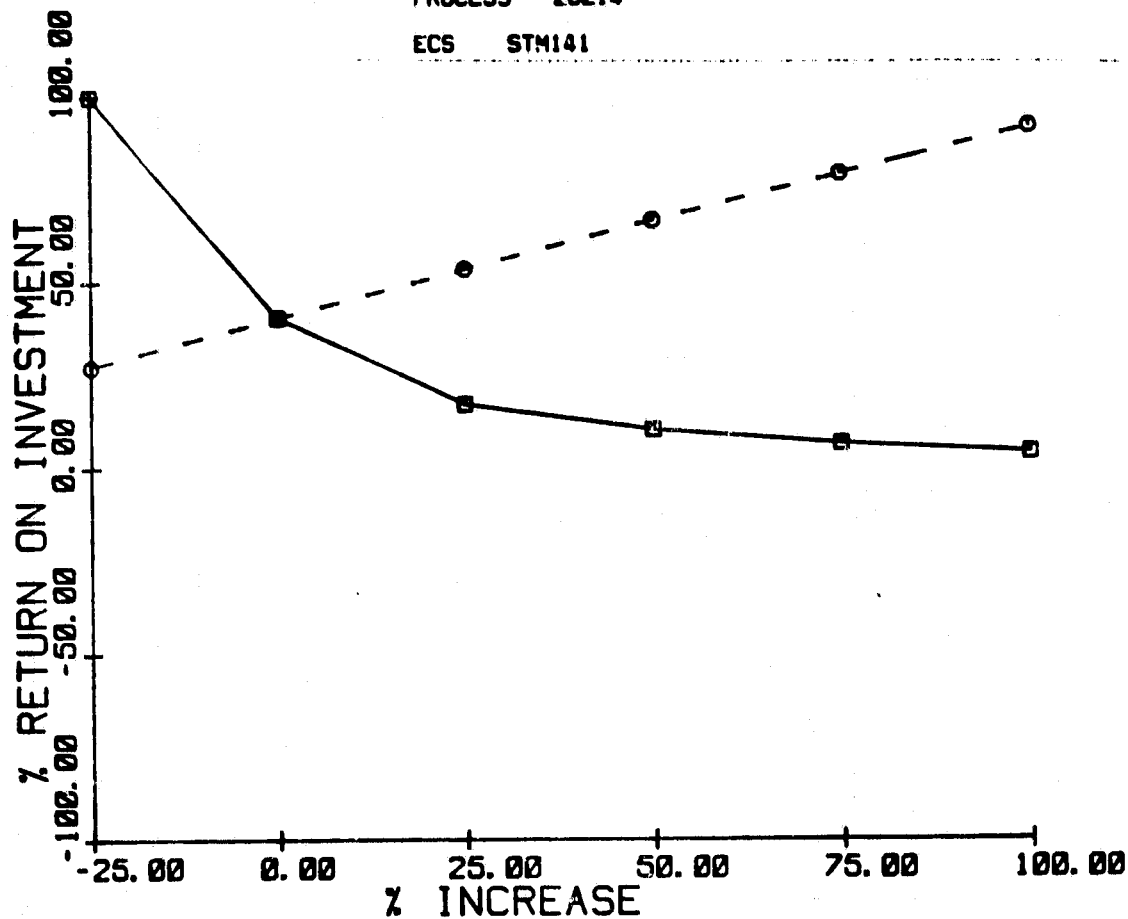
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 20214

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 20

PROCESS HEAT- 810

(BTU*10**6)

WASTE FUEL- 250

(BTU*10**6)

POWER/HEAT- 0.182

CAPITAL COST- 48.7

LAEC - 24.875

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 48.8

LAEC - 18.475

ROI - 48

MW(GEN) - 20

FUEL - COAL-FGD

- CAPITAL COST
- - - ○ - ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/70

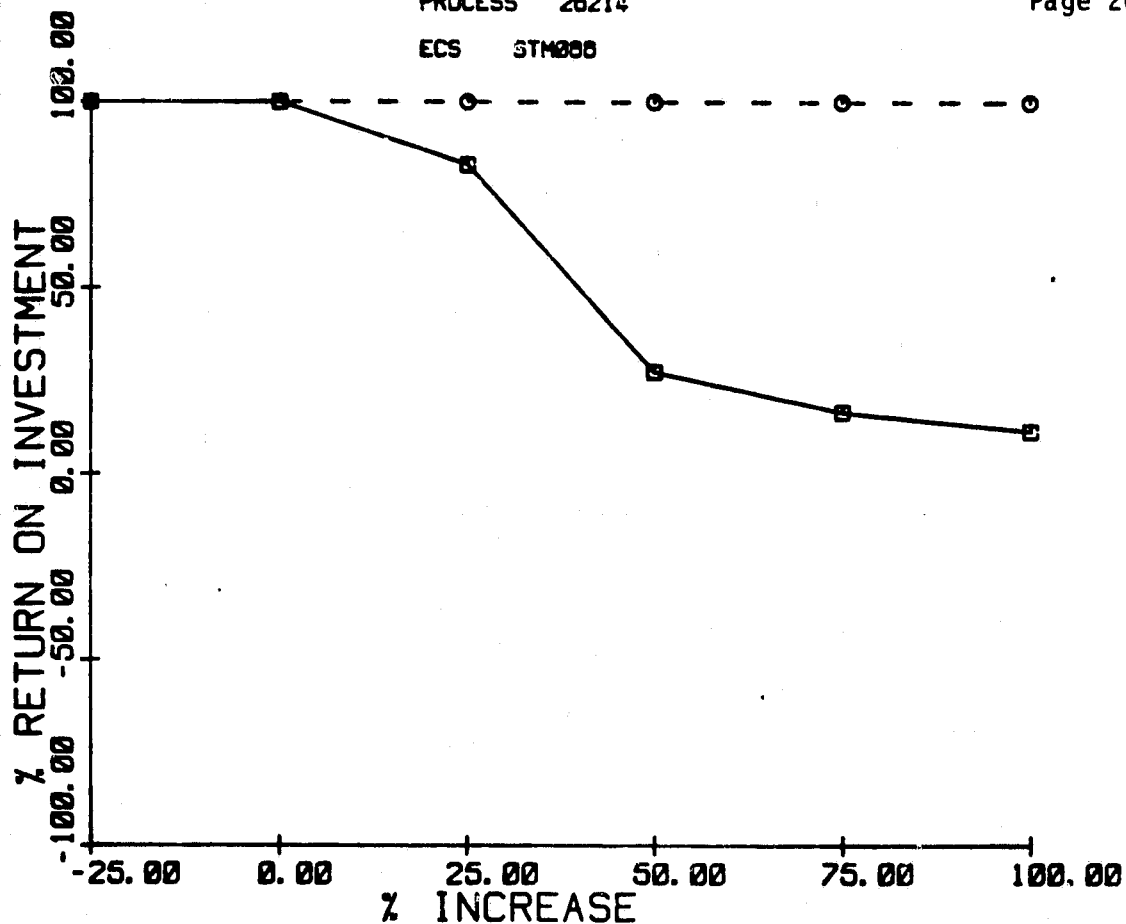
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

PROCESS 20214

Page 207

ECS STM000



BASE CASE

PROCESS

MW- 20

PROCESS HEAT- 810

(BTU*10**6)

WASTE FUEL- 250

(BTU*10**6)

POWER/HEAT- 0.182

NO COGENERATION

CAPITAL COST- 40.7

LAEC - 24.875

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 35.6

LAEC - 16.530

ROI - 999

MW(GEN) - 20

FUEL - COAL-AFB

- CAPITAL COST
- - -○- ELECTRIC POWER
- NO-CGN FUEL
- ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/70

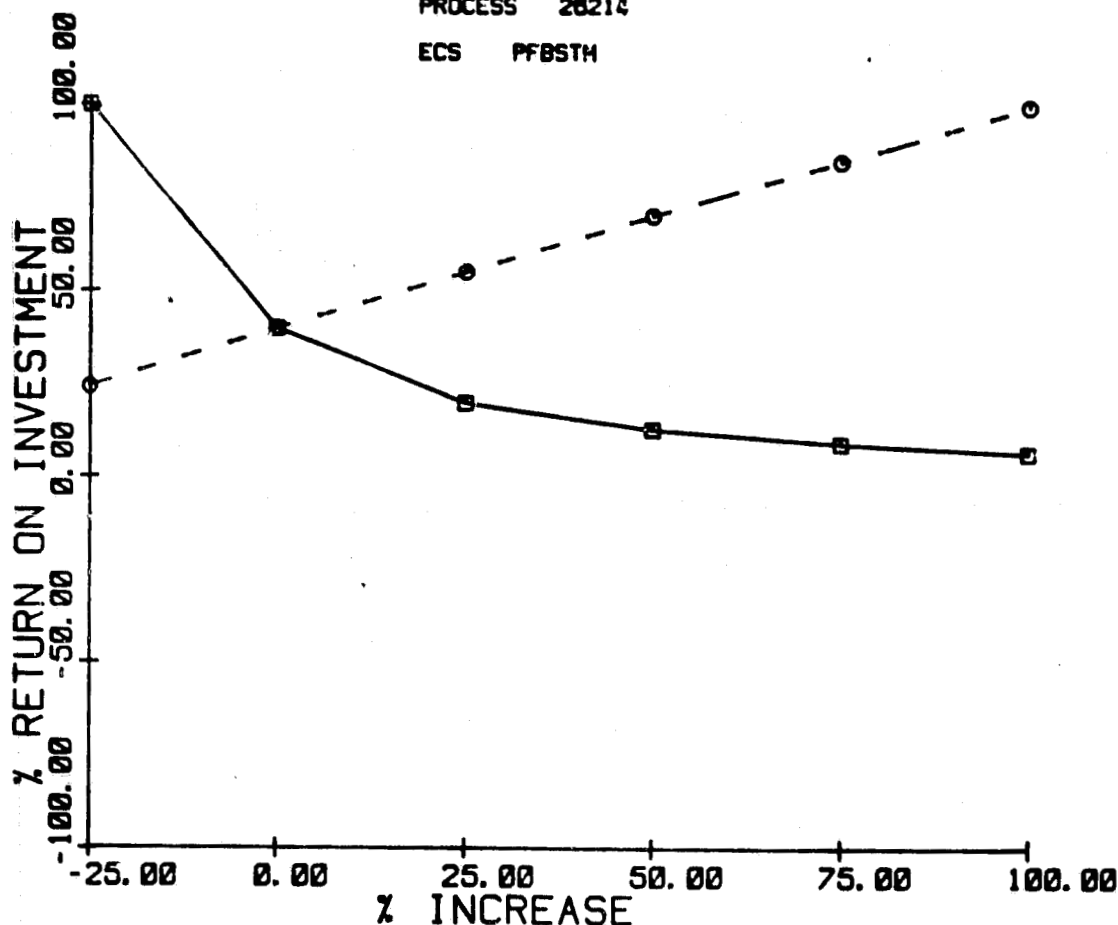
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 20214

ECS PFBSTH



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 20		CAPITAL COST- 52.2
PROCESS HEAT- 610	CAPITAL COST- 40.7	LAEC - 16.170
(BTU*10**6)	LAEC - 24.875	ROI - 30
WASTE FUEL- 250	FUEL - COAL-FGD	MW(GEN) - 62
(BTU*10**6)		FUEL - COAL-PFB
POWER/HEAT- 0.162		
■ — ■ CAPITAL COST		
○ - - - ○ ELECTRIC POWER		
NO-CGN FUEL		
ECS FUEL		

GENERAL ELECTRIC COMPANY

DATE 04/17/79

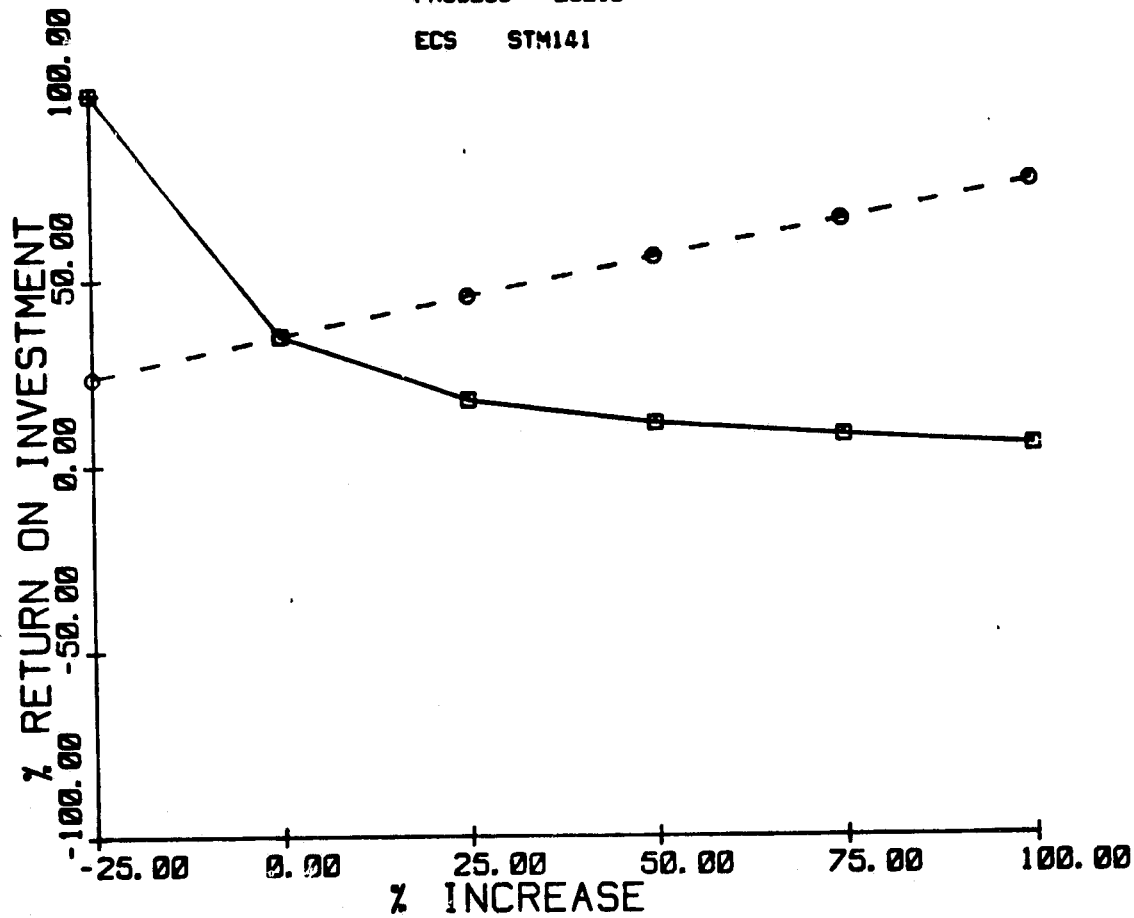
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 26216

ECS STM141



BASE CASE

NO COGENERATION

PROCESS

MW- 20

PROCESS HEAT- 307

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.222

CAPITAL COST- 20.0

LAEC - 16.426

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 27.1

LAEC - 12.894

ROI - 34

MW(GEN) - 16

FUEL - COAL-FGD

———— ■ CAPITAL COST
 - - - - ○ ELECTRIC POWER
 NO-CGN FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/79

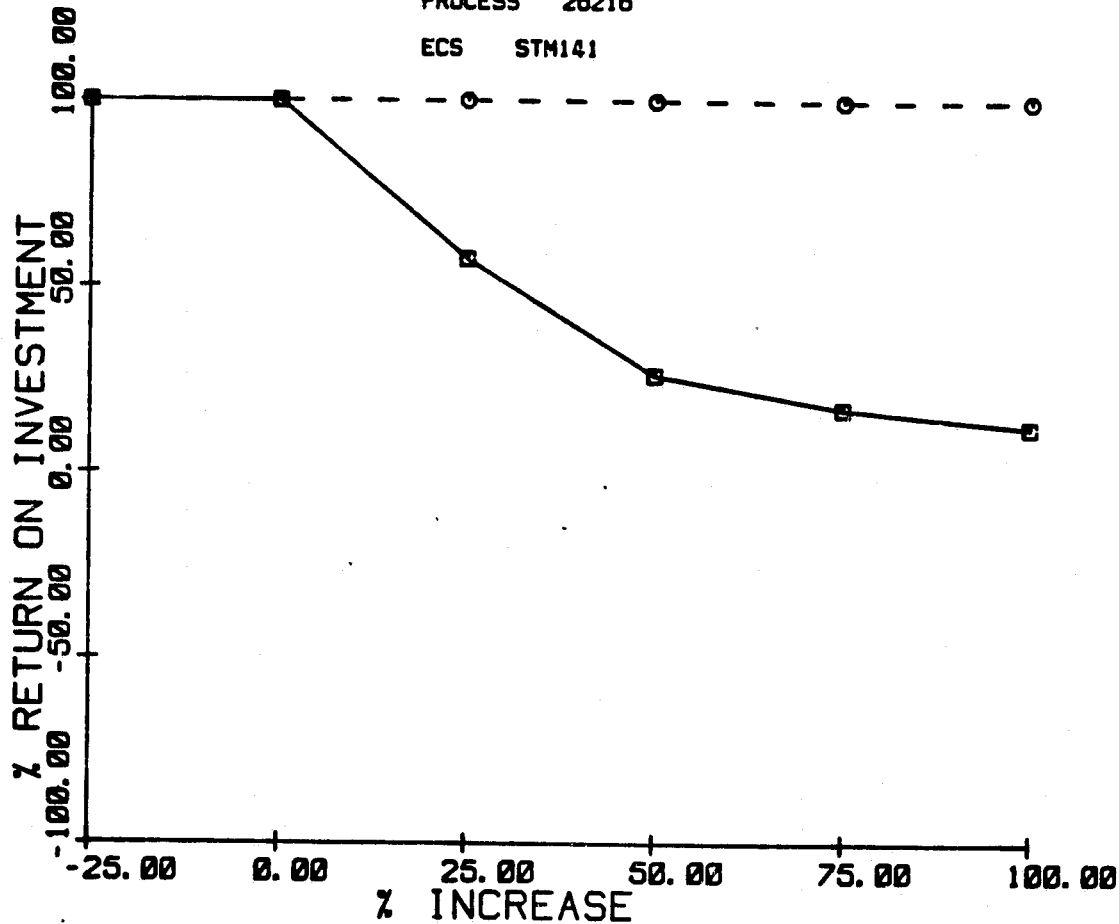
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 26210

ECS STM141



BASE CASE

NO COGENERATION

COGENERATION

PROCESS
MW- 20

PROCESS HEAT- 307

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.222

CAPITAL COST- 20.0

LAEC - 16.426

FUEL - COAL-F60

CAPITAL COST- 10.5

LAEC - 11.912

ROI - 900

MW(GEN) - 10

FUEL - COAL-AFB

■ — ■ CAPITAL COST
 ○ - - - ○ ELECTRIC POWER
 NO-CGN.FUEL
 ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/79

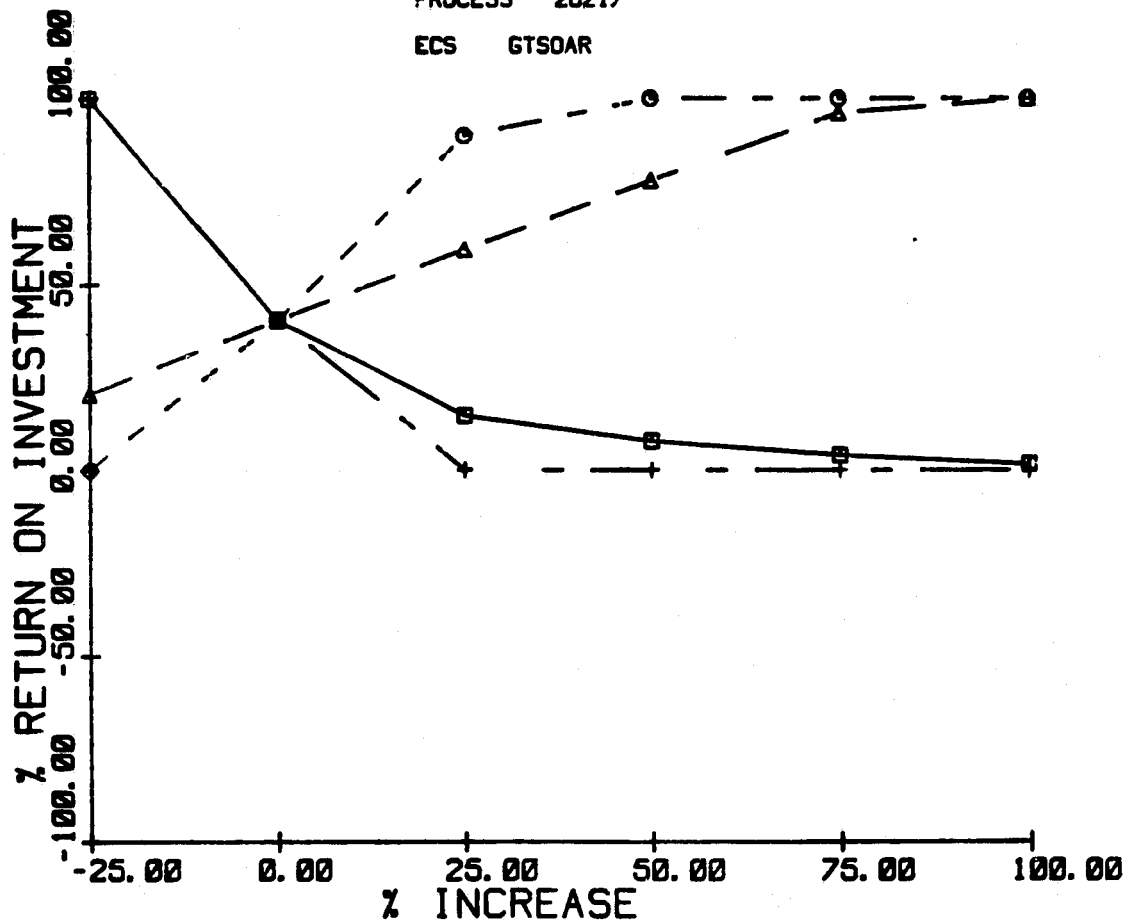
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

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PROCESS 28217

ECS GTSOAR



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 31		CAPITAL COST- 17.5
PROCESS HEAT- 183	CAPITAL COST- 14.8	LAEC - 14.987
(BTU*10**6)	LAEC - 18.517	ROI - 48
WASTE FUEL- 0	FUEL - COAL-FGD	MW(GEN) - 31
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 0.554		

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/79

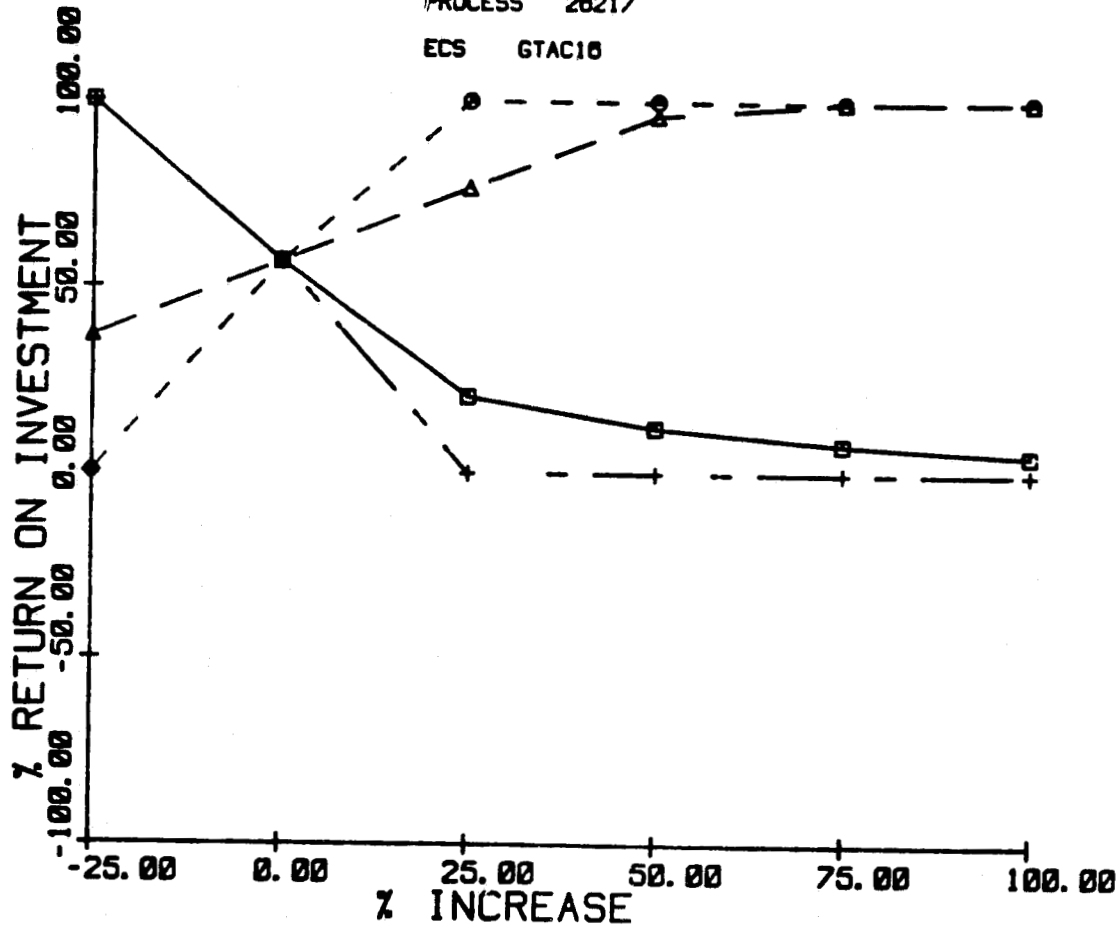
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

Page 212

PROCESS 20217

ECS GTAC10



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 183

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.584

CAPITAL COST- 14.8

LAEC - 18.517

FUEL - COAL-F60

COGENERATION

CAPITAL COST- 17.4

LAEC - 14.382

ROI - 50

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/70

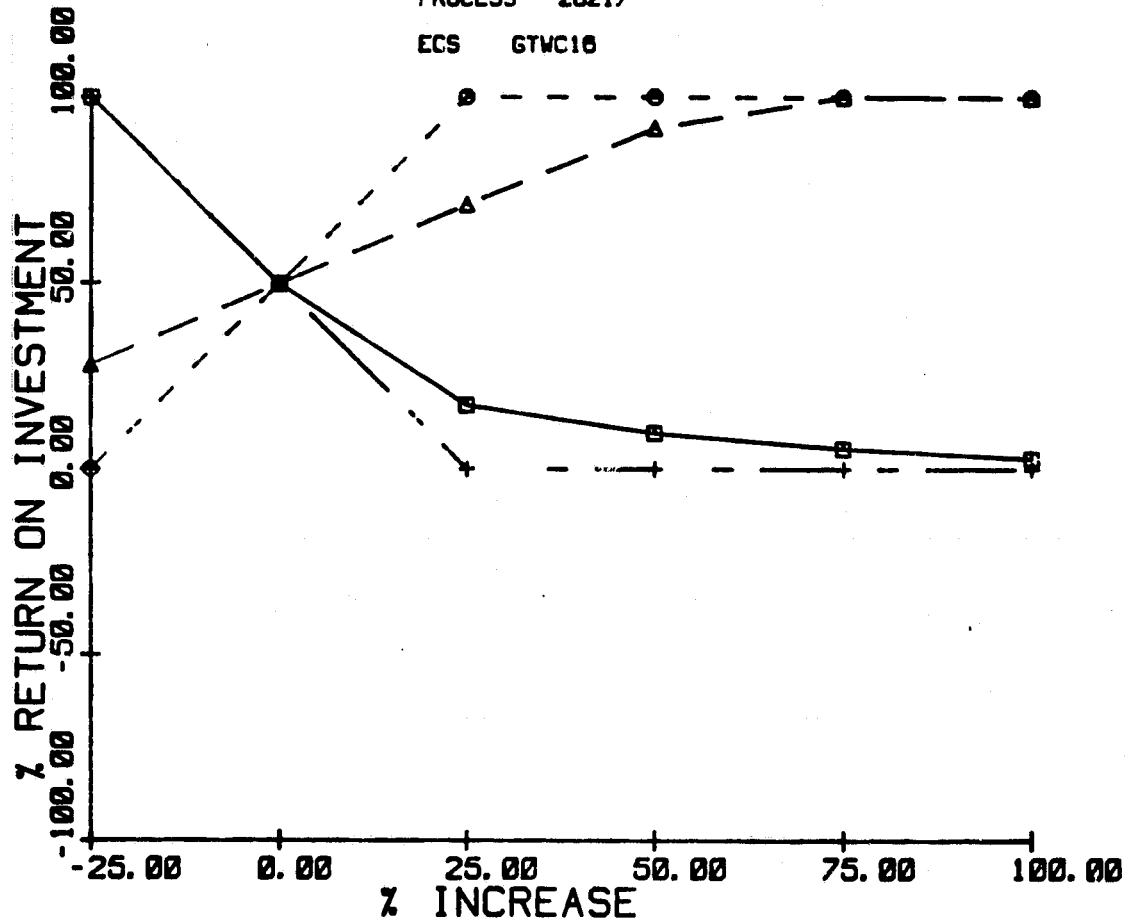
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

Page 213

PROCESS 20217

ECS GTWC10



BASE CASE

NO COGENERATION

COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 103

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.504

CAPITAL COST- 14.0

LAEC - 10.517

FUEL - COAL-FGD

CAPITAL COST- 17.2

LAEC - 14.701

ROI - 40

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/70

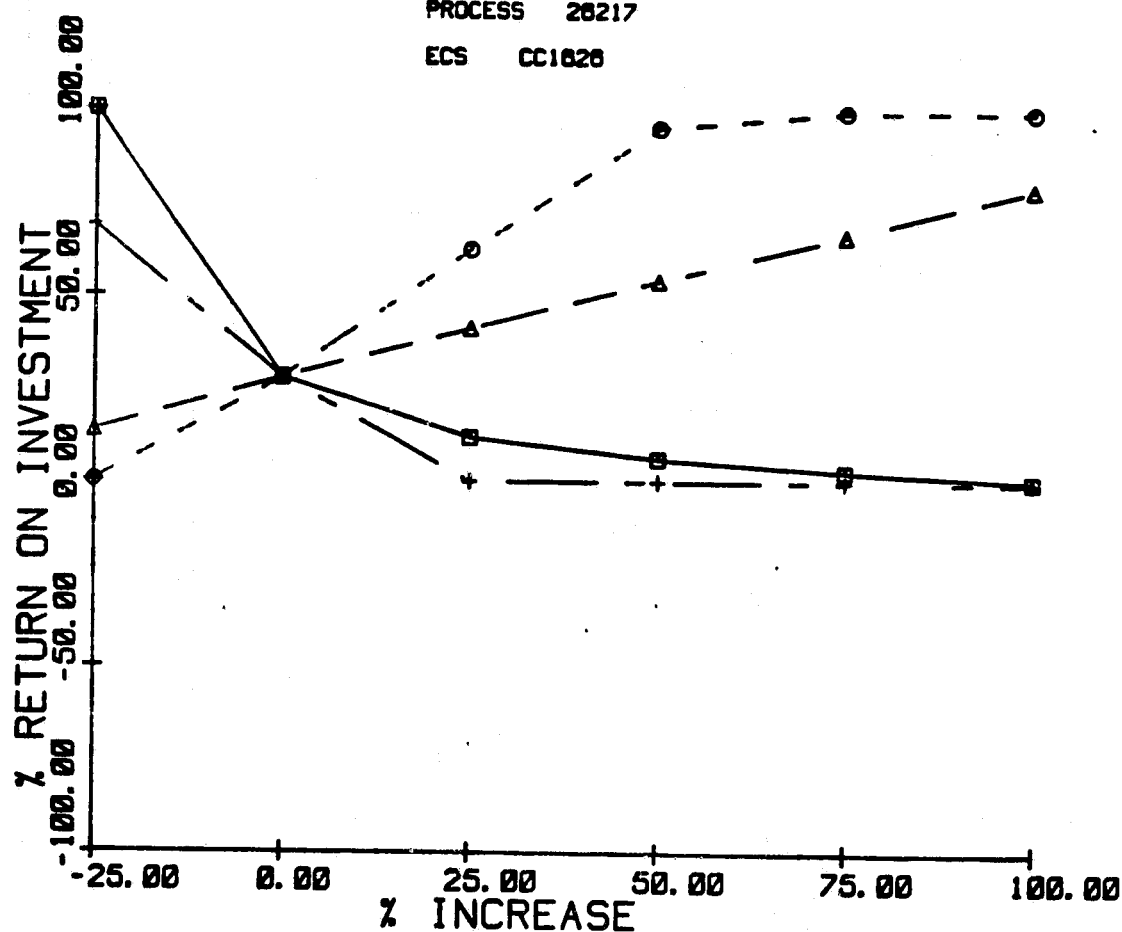
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

SENSITIVITY STUDY

Page 214

PROCESS 20217

ECS CC1020



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 103

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.504

CAPITAL COST- 14.0

LAEC - 10.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.1

LAEC - 15.150

ROI - 27

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/70

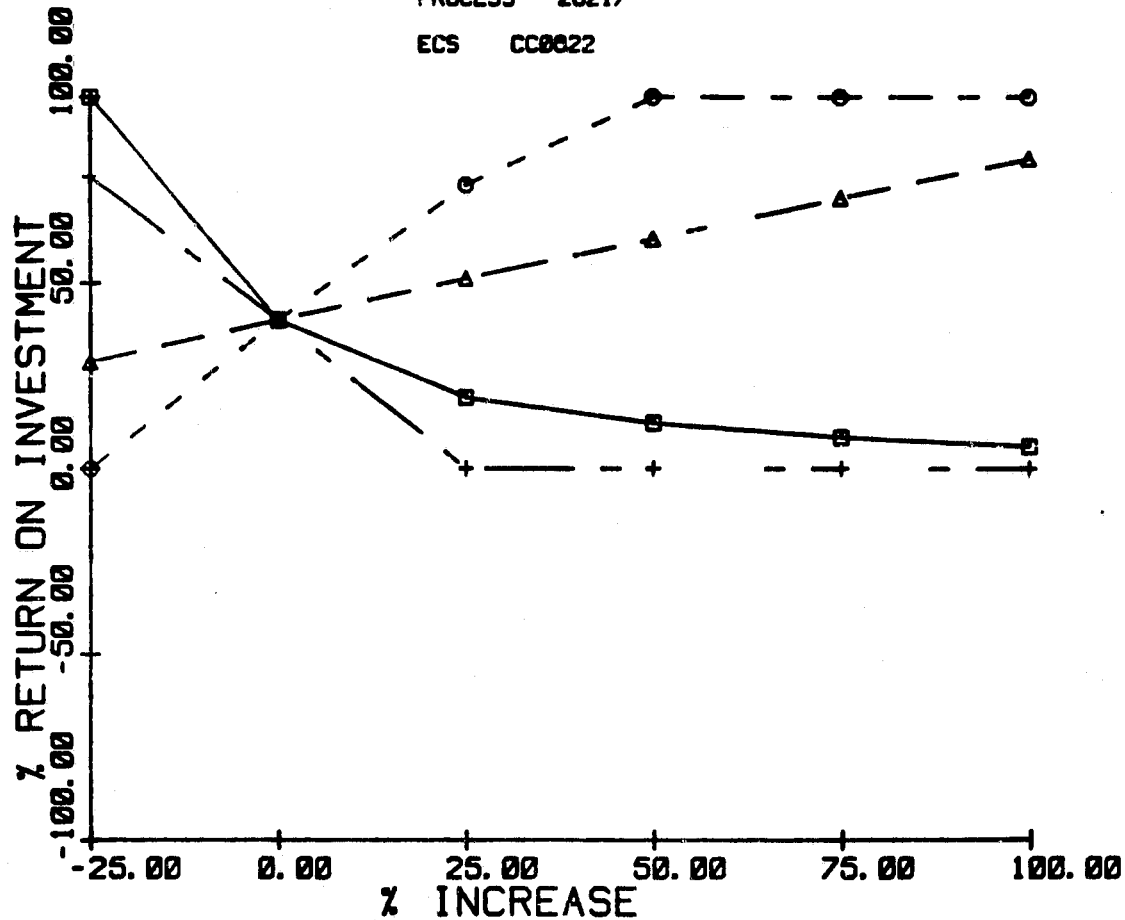
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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SENSITIVITY STUDY

PROCESS 20217

ECS CC0022



BASE CASE

PROCESS	NO COGENERATION	COGENERATION
MW- 31		CAPITAL COST- 10.7
PROCESS HEAT- 103	CAPITAL COST- 14.0	LAEC - 13.004
(BTU*10**6)	LAEC - 10.517	ROI - 40
WASTE FUEL- 0	FUEL - COAL-FGD	MW(GEN) - 45
(BTU*10**6)		FUEL - RESIDUAL
POWER/HEAT- 0.504		

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

GENERAL ELECTRIC COMPANY

DATE 04/17/79

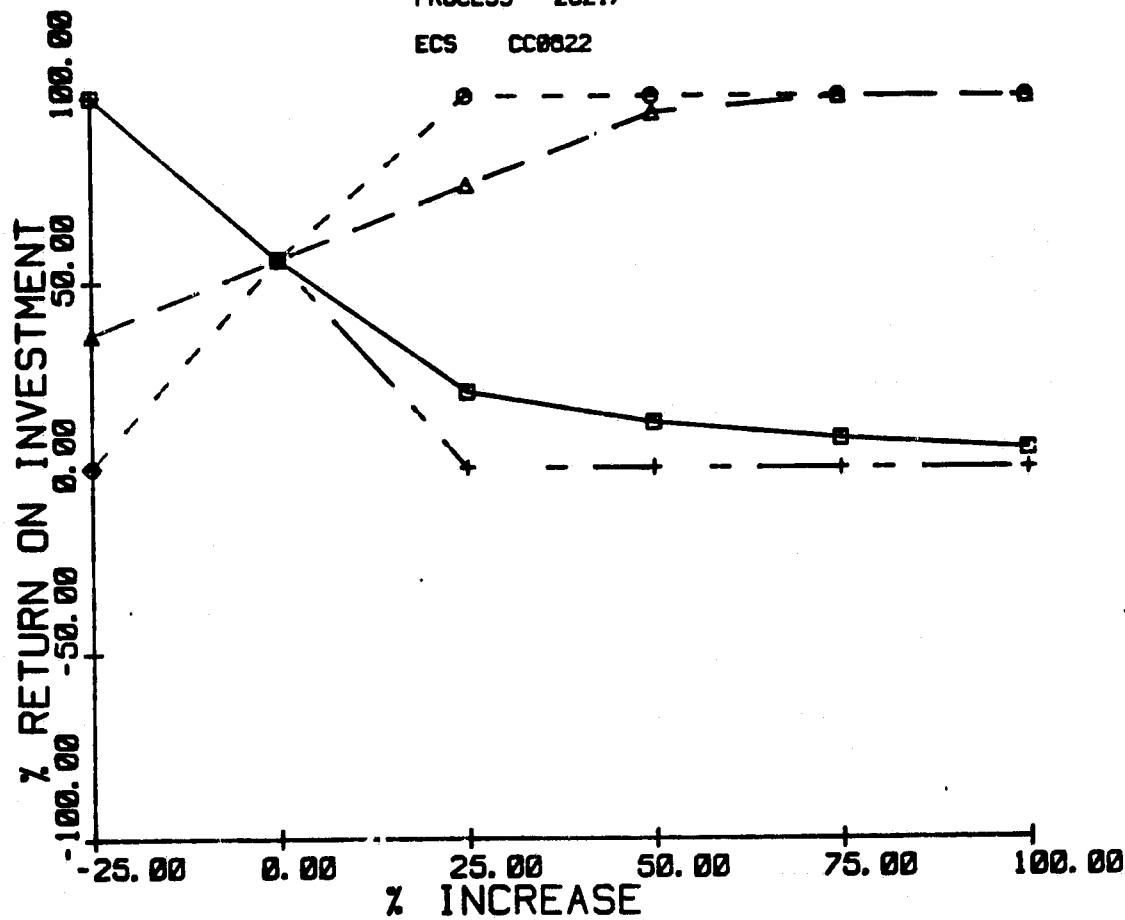
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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SENSITIVITY STUDY

PROCESS 20217

ECS CC0022



BASE CASE

NO COGENERATION

PROCESS

MW- 31

PROCESS HEAT- 103

(BTU*10**6)

WASTE FUEL- 0

(BTU*10**6)

POWER/HEAT- 0.584

CAPITAL COST- 14.0

LAEC - 18.517

FUEL - COAL-FGD

COGENERATION

CAPITAL COST- 10.9

LAEC - 14.328

ROI - 58

MW(GEN) - 31

FUEL - RESIDUAL

- — — — □ CAPITAL COST
- — — — ○ ELECTRIC POWER
- △ — — — △ NO-CGN FUEL
- + — — — + ECS FUEL

COAL-FIRED NOCOGENERATION BOILER PROCESS

6.1 - FUEL & EMISSIONS SAVINGS BY PROCESS- ECS MATCH

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 06/12/79

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 1

FUEL UNITS *
EMISSION UNITS=
COST **\$10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL A.L

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS		ECS	*****FUEL SAVINGS*****				-----EMISSIONS SAVINGS-----				CAPITL--ELECTRIC POWER--		
			*****DIRECT*****		TOTAL	FESR	-----DIRECT-----		TOTAL	EMSR	SAVING	TOTAL	COST LAEC
			FUEL	OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	EXPORT	SAVED
											10 ⁴	MWH X 10 ⁴	10 ⁴ /yr
20111	STM141	RESIDU	0.	-0.002	0.	0.003	0.26	-1.	-1.	-0.	1.	2.	0. 137.
20111	STM141	RESIDU	0.	-0.002	0.	0.003	0.28	-1.	-1.	-0.	1.	2.	0. 105.
20111	STM141	COAL-F	0.	-0.002	0.	0.003	0.26	-1.	-2.	-0.	1.	0.	0. 311.
20111	STM141	COAL-F	0.	-0.002	0.	0.003	0.28	-1.	-2.	-0.	1.	1.	0. 239.
20111	STM141	COAL-A	0.	-0.002	0.	0.003	0.26	1.	-2.	-0.	2.	0.	0. 270.
20111	STM141	COAL-A	0.	-0.002	0.	0.003	0.28	1.	-2.	-0.	3.	1.	0. 195.
20111	STM088	RESIDU	0.	-0.001	0.	0.002	0.23	-0.	-1.	-0.	1.	1.	0. 103.
20111	STM088	COAL-F	0.	-0.001	0.	0.002	0.23	-0.	-2.	-0.	1.	0.	0. 245.
20111	STM088	COAL-A	0.	-0.001	0.	0.002	0.23	1.	-2.	-0.	2.	0.	0. 210.
20111	PFBSTM	COAL-P	0.	-0.002	0.	0.003	0.26	1.	-2.	0.	3.	0.	0. 395.
20111	PFBSTM	COAL-P	0.	-0.003	0.	0.004	0.33	1.	-3.	0.	4.	1.	0. 223.
20111	TISTMT	RESIDU	0.	-0.002	0.	0.003	0.26	-1.	-1.	-0.	1.	2.	0. 462.
20111	TISTMT	RESIDU	0.	-0.003	0.	0.005	0.37	-1.	-1.	-0.	2.	3.	0. 348.
20111	TISTMT	COAL	0.	-0.002	0.	0.003	0.26	-1.	-2.	-0.	1.	0.	0. 703.
20111	TISTMT	COAL	0.	-0.003	0.	0.005	0.37	-1.	-3.	-0.	2.	2.	0. 457.
20111	TIHRSG	RESIDU	0.	-0.001	0.	0.002	0.17	-1.	-1.	-0.	1.	1.	0. 839.
20111	TIHRSG	COAL	0.	-0.001	0.	0.002	0.17	-1.	-2.	-0.	1.	-0.	0. 727.
20111	STIRL	DISTIL	0.	-0.002	0.	0.002	0.21	0.	0.	0.	2.	3.	0. 114.
20111	STIRL	DISTIL	0.	-0.005	0.	0.005	0.32	-0.	-1.	0.	3.	5.	0. 66.
20111	STIRL	RESIDU	0.	-0.002	0.	0.002	0.21	-1.	-1.	-0.	1.	1.	0. 110.
20111	STIRL	RESIDU	0.	-0.005	0.	0.005	0.32	-2.	-2.	-1.	2.	4.	0. 62.
20111	STIRL	COAL	0.	-0.002	0.	0.002	0.21	-1.	-2.	-0.	1.	0.	0. 318.
20111	STIRL	COAL	0.	-0.005	0.	0.005	0.32	-2.	-4.	-0.	2.	2.	0. 128.
20111	HEGT85	COAL-A	0.	-0.002	0.	0.002	0.19	1.	-3.	-0.	2.	-0.	0. 594.
20111	HEGT85	COAL-A	0.	-0.007	0.	0.006	0.31	-0.	-6.	-0.	4.	2.	0. 318.
20111	HEGT60	COAL-A	0.	-0.003	0.	0.001	0.13	1.	-3.	-0.	2.	-0.	0. 587.
20111	HEGT60	COAL-A	0.	-0.007	0.	0.003	0.20	-0.	-6.	-0.	3.	0.	0. 537.
20111	HEGT00	COAL-A	0.	-0.003	0.	0.001	0.12	0.	-3.	-0.	2.	-0.	0. 513.
20111	HEGT00	COAL-A	0.	-0.004	0.	0.002	0.14	0.	-3.	-0.	2.	-0.	0. 397.
20111	FCMCCL	COAL	0.	-0.002	0.	0.002	0.23	1.	0.	0.	2.	3.	0. 512.
20111	FCMCCL	COAL	0.	-0.005	0.	0.005	0.34	2.	2.	0.	5.	8.	0. 272.
20111	FCSTCL	COAL	0.	-0.002	0.	0.002	0.24	1.	-0.	0.	2.	2.	0. 512.
20111	FCSTCL	COAL	0.	-0.008	0.	0.010	0.42	2.	2.	0.	8.	12.	0. 213.
20111	IGGTST	COAL	0.	-0.002	0.	0.002	0.19	-1.	-3.	0.	1.	-0.	0. 552.
20111	IGGTST	COAL	0.	-0.007	0.	0.006	0.31	-2.	-5.	0.	2.	2.	0. 259.
20111	GTSGAR	RESIDU	-0.002	0.	-0.002	0.004	0.21	-1.	-1.	-0.	0.	2.	0. 144.
20111	GTSGAR	RESIDU	-0.005	0.	-0.005	0.010	0.31	-2.	-2.	-0.	1.	4.	0. 80.
20111	GTAC08	RESIDU	0.	-0.002	0.	0.002	0.22	-2.	-1.	-0.	1.	1.	0. 119.
20111	GTAC08	RESIDU	0.	-0.004	0.	0.004	0.31	-4.	-2.	-0.	-1.	3.	0. 64.
20111	GTAC12	RESIDU	0.	-0.002	0.	0.002	0.23	-2.	-1.	-0.	-0.	2.	0. 120.
20111	GTAC12	RESIDU	0.	-0.005	0.	0.005	0.34	-4.	-2.	-1.	-1.	4.	0. 64.
20111	GTAC16	RESIDU	0.	-0.002	0.	0.002	0.23	-2.	-1.	-0.	-0.	2.	0. 125.
20111	GTAC16	RESIDU	0.	-0.005	0.	0.006	0.35	-5.	-2.	-1.	-1.	4.	0. 68.
20111	GTWC16	RESIDU	0.	-0.002	0.	0.002	0.20	-2.	-1.	-0.	-1.	1.	0. 142.
20111	GTWC16	RESIDU	0.	-0.007	0.	0.006	0.31	-5.	-3.	-1.	-2.	4.	0. 76.

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 2

FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
EMISSION UNITS= TIME 1990 LEVEL ALL
COST = \$10**9 TYPE MATCH=POWER

PROCS	ECS	ECS	****FUEL SAVING \$****	***** EMISSIONS SAVING \$ *****	CAPITL--ELECTRIC POWER---													
			*****DIRECT*****	-----TOTAL-----	-----FESR-----	DIRECT-----	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC						
			FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED					
												MWH						
20111	CC1626	RESIDU	0.	-0.002	0.	0.002	0.20	-2.	-1.	-0.	-0.	1.	-0.0.11	-0.	0	165.	-0.	
20111	CC1626	RESIDU	0.	-0.012	0.	0.010	0.37	-8.	-5.	-1.	-1.	7.	-0.0.21	3.	2.	79.	-1.	
20111	CC1622	RESIDU	0.	-0.002	0.	0.002	0.21	-2.	-1.	-0.	-0.	1.	-0.0.12	-0.	0.	153.	-0.	
20111	CC1622	RESIDU	0.	-0.010	0.	0.010	0.38	-8.	-4.	-1.	-1.	7.	-0.0.22	3.	1.	75.	-1.	
20111	CC1222	RESIDU	0.	-0.002	0.	0.002	0.21	-2.	-1.	-0.	-0.	1.	-0.0.13	-0.	0.	148.	-0.	
20111	CC1222	RESIDU	0.	-0.010	0.	0.010	0.38	-7.	-4.	-1.	-1.	7.	-0.0.22	3.	1.	72.	-1.	
20111	CC0822	RESIDU	0.	-0.002	0.	0.002	0.22	-2.	-1.	-0.	-0.	2.	-0.0.13	-0.	0.	154.	-0.	
20111	CC0822	RESIDU	0.	-0.008	0.	0.009	0.39	-6.	-3.	-1.	-1.	6.	-0.0.23	2.	1.	75.	-0.	
20111	STIG13	RESIDU	0.	-0.004	0.	0.001	0.07	-2.	-1.	-0.	-1.	1.	0.0.00	-0.	0.	167.	-0.	
20111	STIG15	RESIDU	0.	-0.382	0.	0.060	0.17	-231.	-153.	-11.	-85.	88.	1.0.01	102.	43.	85.	-13.	
20111	STIG10	RESIDU	0.	-0.003	0.	0.001	0.10	-2.	-1.	-0.	-1.	1.	0.0.03	-0.	0.	154.	-0.	
20111	STIG10	RESIDU	0.	-0.032	0.	0.011	0.22	-21.	-13.	-1.	-7.	10.	0.0.06	8.	4.	73.	-1.	
20111	STIG15	RESIDU	0.	-0.003	0.	0.001	0.12	-2.	-1.	-0.	-1.	1.	0.0.04	-0.	0.	148.	-0.	
20111	STIG15	RESIDU	0.	-0.018	0.	0.007	0.23	-12.	-7.	-0.	-4.	6.	0.0.07	4.	2.	74.	-1.	
20111	DEADV3	RESIDU	0.	-0.002	0.	0.002	0.20	-3.	-1.	-0.	-2.	1.	-0.0.03	-1.	0.	212.	-0.	
20111	DEADV3	RESIDU	0.	-0.009	0.	0.008	0.35	-12.	-4.	-1.	-7.	6.	-0.0.06	1.	1.	101.	-1.	
20111	DEHTPM	RESIDU	0.	-0.002	0.	0.003	0.24	-3.	-1.	-0.	-2.	2.	-0.0.00	-1.	0.	209.	-0.	
20111	DEHTPM	RESIDU	0.	-0.006	0.	0.008	0.40	-9.	-2.	-1.	-5.	5.	-0.0.01	0.	1.	106.	-1.	
20111	DESOA3	DISTIL	-0.002	0.	-0.002	0.004	0.19	-7.	1.	0.	-5.	3.	-0.0.35	-0.	0.	154.	-0.	
20111	DESOA3	DISTIL	-0.010	0.	-0.010	0.018	0.33	-30.	-0.	0.	-24.	9.	0.0.74	1.	1.	106.	-1.	
20111	DESOA3	RESIDU	-0.002	0.	-0.002	0.004	0.19	-15.	-1.	-0.	-14.	1.	0.0.77	-0.	0.	149.	-0.	
20111	DESOA3	RESIDU	-0.010	0.	-0.010	0.018	0.33	-64.	-4.	-0.	-58.	6.	1.0.60	1.	1.	102.	-1.	
20111	GTSCAD	DISTIL	-0.002	0.	-0.002	0.004	0.22	-1.	-0.	0.	0.	2.	0.0.47	0.	0.	119.	-0.	
20111	GTSCAD	DISTIL	-0.005	0.	-0.005	0.010	0.32	-2.	-1.	0.	1.	4.	0.0.56	2.	0.	83.	-0.	
20111	GTRA08	DISTIL	0.	-0.002	0.	0.002	0.21	-0.	0.	0.	1.	3.	1.0.46	-0.	0.	158.	-0.	
20111	GTRA08	DISTIL	0.	-0.007	0.	0.007	0.36	-3.	-1.	0.	2.	7.	1.0.51	2.	1.	84.	-0.	
20111	GTRA12	DISTIL	0.	-0.002	0.	0.002	0.21	-0.	0.	0.	1.	3.	1.0.47	-0.	0.	152.	-0.	
20111	GTRA12	DISTIL	0.	-0.007	0.	0.008	0.36	-3.	-1.	0.	2.	7.	1.0.51	2.	1.	83.	-0.	
20111	GTRA16	DISTIL	0.	-0.002	0.	0.002	0.21	-0.	0.	0.	1.	3.	1.0.46	-0.	0.	158.	-0.	
20111	GTRA16	DISTIL	0.	-0.007	0.	0.007	0.36	-3.	-1.	0.	1.	7.	1.0.51	1.	1.	88.	-0.	
20111	GTR208	DISTIL	0.	-0.002	0.	0.002	0.21	-1.	0.	0.	1.	3.	1.0.46	-0.	0.	143.	-0.	
20111	GTR208	DISTIL	0.	-0.006	0.	0.006	0.34	-3.	-1.	0.	1.	6.	1.0.49	2.	1.	79.	-0.	
20111	GTR212	DISTIL	0.	-0.002	0.	0.002	0.21	-1.	0.	0.	1.	3.	1.0.46	-0.	0.	148.	-0.	
20111	GTR212	DISTIL	0.	-0.006	0.	0.006	0.34	-3.	-1.	0.	1.	6.	1.0.49	2.	1.	82.	-0.	
20111	GTR216	DISTIL	0.	-0.002	0.	0.002	0.22	-0.	0.	0.	1.	3.	1.0.46	-0.	0.	150.	-0.	
20111	GTR216	DISTIL	0.	-0.006	0.	0.007	0.35	-3.	-1.	0.	1.	6.	1.0.50	1.	1.	83.	-0.	
20111	GTRW08	DISTIL	0.	-0.003	0.	0.002	0.18	-1.	-0.	0.	1.	3.	1.0.44	-0.	0.	166.	-0.	
20111	GTRW08	DISTIL	0.	-0.010	0.	0.008	0.31	-4.	-2.	0.	1.	8.	1.0.48	2.	1.	88.	-1.	
20111	GTRW12	DISTIL	0.	-0.002	0.	0.002	0.19	-0.	0.	0.	1.	3.	1.0.45	-0.	0.	165.	-0.	
20111	GTRW12	DISTIL	0.	-0.010	0.	0.008	0.33	-4.	-2.	0.	2.	8.	1.0.49	2.	1.	86.	-1.	
20111	GTRW16	DISTIL	0.	-0.002	0.	0.002	0.19	-1.	0.	0.	1.	3.	1.0.45	-1.	0.	170.	-0.	
20111	GTRW16	DISTIL	0.	-0.010	0.	0.008	0.33	-4.	-2.	0.	1.	8.	1.0.49	2.	1.	90.	-1.	
20111	GTR308	DISTIL	0.	-0.003	0.	0.002	0.17	-1.	-0.	0.	1.	3.	1.0.43	-0.	0.	152.	-0.	
20111	GTR308	DISTIL	0.	-0.008	0.	0.005	0.26	-4.	-2.	0.	1.	6.	1.0.45	2.	1.	84.	-0.	
20111	GTR312	DISTIL	0.	-0.002	0.	0.002	0.19	-1.	0.	0.	1.	3.	1.0.45	-0.	0.	154.	-0.	
20111	GTR3	DISTIL	0.	-0.009	0.	0.007	0.32	-4.	0.	0.	1.	7.	1.0.48	2.	1.	83.	-1.	

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PAGE 3

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---								
		*****DIRECT*****		TOTAL	FESR	DIRECT		TOTAL	EMSR	SAVING	TOTAL	COST	LAEC					
		FUEL	OIL+GAS	COAL	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED					
20111	GTR316	DISTIL	0.	-0.002	0.	0.002	0.19	-1.	0.	0.	1.	3.	1.	0.45	-0.	0.	162.	-0.
20111	GTR316	DISTIL	0.	-0.009	0.	0.007	0.32	-4.	-2.	0.	1.	7.	1.	0.48	2.	1.	87.	-1.
20111	FCPADS	DISTIL	0.	-0.002	0.	0.002	0.19	0.	1.	0.	2.	4.	1.	0.66	0.	0.	128.	-0.
20111	FCPADS	DISTIL	0.	-0.011	0.	0.009	0.35	-1.	2.	0.	5.	14.	2.	0.86	3.	1.	86.	-1.
20111	FCMCDS	DISTIL	0.	-0.002	0.	0.002	0.18	-2.	1.	0.	-0.	4.	1.	0.43	-0.	0.	138.	-0.
20111	FCMCDS	DISTIL	0.	-0.016	0.	0.012	0.36	-14.	2.	-0.	-5.	18.	2.	0.46	3.	2.	97.	-1.
20261	STM141	RESIDU	0.	-0.001	0.	0.001	0.24	-0.	-0.	-0.	0.	1.	0.	0.25	-0.	0.	139.	-0.
20261	STM141	COAL-F	0.	-0.001	0.	0.001	0.24	-0.	-1.	-0.	0.	0.	0.	0.17	-1.	0.	263.	-0.
20261	STM141	COAL-A	0.	-0.001	0.	0.001	0.24	0.	-1.	-0.	1.	0.	0.	0.32	-1.	0.	237.	-0.
20261	STM088	RESIDU	0.	-0.001	0.	0.001	0.19	-0.	-0.	-0.	0.	1.	0.	0.20	-0.	0.	130.	-0.
20261	STM088	COAL-F	0.	-0.001	0.	0.001	0.19	-0.	-1.	-0.	0.	0.	0.	0.12	-1.	0.	252.	-0.
20261	STM088	COAL-A	0.	-0.001	0.	0.001	0.19	0.	-1.	-0.	1.	0.	0.	0.26	-1.	0.	234.	-0.
20261	PFBSTM	COAL-P	0.	-0.001	0.	0.002	0.32	1.	-1.	0.	2.	0.	0.	0.48	-2.	0.	374.	-1.
20261	PFBSTM	COAL-P	0.	-0.001	0.	0.002	0.33	1.	-1.	0.	2.	1.	0.	0.49	-2.	0.	306.	-0.
20261	TISTMT	RESIDU	0.	-0.001	0.	0.002	0.32	-0.	-0.	-0.	1.	1.	0.	0.34	-4.	0.	511.	-1.
20261	TISTMT	RESIDU	0.	-0.002	0.	0.002	0.37	-1.	-1.	-0.	1.	2.	0.	0.39	-5.	0.	429.	-1.
20261	TISTMT	COAL	0.	-0.001	0.	0.002	0.32	-0.	-1.	-0.	1.	0.	0.	0.25	-6.	0.	737.	-1.
20261	TISTMT	COAL	0.	-0.002	0.	0.002	0.37	-1.	-1.	-0.	1.	1.	0.	0.30	-7.	0.	572.	-1.
20261	TIHRSG	RESIDU	0.	-0.001	0.	0.001	0.14	-0.	-0.	-0.	0.	1.	0.	0.15	-4.	0.	476.	-1.
20261	TIHRSG	COAL	0.	-0.001	0.	0.001	0.14	-0.	-1.	-0.	0.	-0.	0.	0.07	-6.	0.	637.	-1.
20261	STIRL	DISTIL	0.	-0.001	0.	0.002	0.27	-0.	-0.	0.	1.	2.	0.	0.57	0.	0.	110.	-0.
20261	STIRL	DISTIL	0.	-0.002	0.	0.003	0.33	-0.	-0.	0.	1.	2.	0.	0.61	1.	0.	60.	-0.
20261	STIRL	RESIDU	0.	-0.001	0.	0.002	0.27	-0.	-1.	-0.	0.	1.	-0.	0.27	0.	0.	106.	-0.
20261	STIRL	RESIDU	0.	-0.002	0.	0.003	0.33	-1.	-1.	-0.	1.	2.	-0.	0.34	1.	0.	56.	-0.
20261	STIRL	COAL	0.	-0.001	0.	0.002	0.27	-0.	-1.	-0.	0.	0.	0.	0.19	-1.	0.	303.	-0.
20261	STIRL	COAL	0.	-0.002	0.	0.003	0.33	-1.	-2.	-0.	1.	1.	0.	0.27	-0.	0.	146.	-0.
20261	HEGT85	COAL-A	0.	-0.002	0.	0.001	0.25	0.	-1.	-0.	1.	0.	0.	0.32	-5.	0.	621.	-1.
20261	HEGT85	COAL-A	0.	-0.003	0.	0.003	0.32	-0.	-2.	-0.	2.	1.	0.	0.38	-7.	0.	400.	-1.
20261	HEGT60	COAL-A	0.	-0.002	0.	0.001	0.16	0.	-2.	-0.	1.	-0.	0.	0.24	-5.	0.	613.	-1.
20261	HEGT60	COAL-A	0.	-0.003	0.	0.002	0.20	-0.	-3.	-0.	1.	0.	0.	0.27	-6.	0.	420.	-1.
20261	HEGT00	COAL-A	0.	-0.002	0.	0.001	0.13	0.	-2.	-0.	1.	-0.	0.	0.19	-4.	0.	428.	-1.
20261	FCMCCL	COAL	0.	-0.001	0.	0.002	0.28	1.	0.	0.	2.	2.	0.	0.80	-4.	0.	520.	-1.
20261	FCMCCL	COAL	0.	-0.002	0.	0.002	0.34	1.	1.	0.	2.	4.	1.	1.00	-4.	0.	342.	-1.
20261	FCSTCL	COAL	0.	-0.001	0.	0.002	0.29	0.	0.	0.	1.	2.	0.	0.66	-4.	0.	537.	-1.
20261	FCSTCL	COAL	0.	-0.004	0.	0.005	0.42	1.	1.	0.	4.	6.	1.	1.00	-5.	0.	270.	-1.
20261	IGGTST	COAL	0.	-0.002	0.	0.001	0.24	-1.	-1.	0.	0.	0.	0.	0.18	-5.	0.	593.	-1.
20261	IGGTST	COAL	0.	-0.003	0.	0.003	0.31	-1.	-2.	0.	1.	1.	1.	0.28	-5.	0.	345.	-1.
20261	GTSOAR	RESIDU	-0.002	0.	-0.002	0.003	0.25	-1.	-1.	-0.	0.	1.	0.	0.37	-0.	0.	152.	-0.
20261	GTSOAR	RESIDU	-0.002	0.	-0.002	0.005	0.31	-1.	-1.	-0.	1.	2.	0.	0.43	0.	0.	95.	-0.
20261	GTAC08	RESIDU	0.	-0.001	0.	0.002	0.27	-1.	-1.	-0.	-0.	1.	-0.	0.10	0.	0.	116.	-0.
20261	GTAC08	RESIDU	0.	-0.002	0.	0.002	0.31	-2.	-1.	-0.	-1.	1.	-0.	0.12	1.	0.	73.	-0.
20261	GTAC12	RESIDU	0.	-0.001	0.	0.002	0.28	-1.	-1.	-0.	-0.	1.	-0.	0.13	0.	0.	123.	-0.
20261	GTAC12	RESIDU	0.	-0.002	0.	0.002	0.34	-2.	-1.	-0.	-0.	2.	-0.	0.16	1.	0.	71.	-0.
20261	GTAC16	RESIDU	0.	-0.001	0.	0.002	0.28	-1.	-1.	-0.	-0.	1.	-0.	0.14	0.	0.	130.	-0.
20261	GTAC16	RESIDU	0.	-0.002	0.	0.003	0.35	-2.	-1.	-0.	-0.	2.	-0.	0.18	1.	0.	75.	-0.
20261	GTWC16	RESIDU	0.	-0.002	0.	0.001	0.24	-1.	-1.	-0.	-0.	1.	-0.	0.10	-0.	0.	152.	-0.

HONEYWELL PAGE PRINTING SYSTEM - PL100-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 4

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING***** - - EMISSIONS SAVING - -										CAPITL--ELECTRIC POWER--						
		ECS *****DIRECT*****		TOTAL		FESR		DIRECT		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
20261	GTWC16	RESIDU	0.	-0.003	0.	0.003	0.31	-2.	-1.	-0.	-1.	2.	-0.	0.13	0.	0.	89.	-0.
20261	CC1626	RESIDU	0.	-0.002	0.	0.001	0.24	-1.	-1.	-0.	-0.	1.	-0.	0.14	-0.	0.	186.	-0.
20261	CC1626	RESIDU	0.	-0.005	0.	0.005	0.37	-4.	-2.	-0.	-1.	3.	-0.	0.21	1.	1.	97.	-0.
20261	CC1622	RESIDU	0.	-0.001	0.	0.001	0.26	-1.	-1.	-0.	-0.	1.	-0.	0.15	-0.	0.	172.	-0.
20261	CC1622	RESIDU	0.	-0.005	0.	0.005	0.38	-3.	-2.	-0.	-1.	3.	-0.	0.22	1.	1.	91.	-0.
20261	CC1222	RESIDU	0.	-0.001	0.	0.001	0.26	-1.	-1.	-0.	-0.	1.	-0.	0.15	-0.	0.	166.	-0.
20261	CC1222	RESIDU	0.	-0.005	0.	0.005	0.38	-3.	-2.	-0.	-1.	3.	-0.	0.22	1.	1.	87.	-0.
20261	CC0822	RESIDU	0.	-0.001	0.	0.002	0.28	-1.	-1.	-0.	-0.	1.	-0.	0.16	-0.	0.	173.	-0.
20261	CC0822	RESIDU	0.	-0.003	0.	0.004	0.39	-3.	-1.	-0.	-0.	3.	-0.	0.23	1.	0.	94.	-0.
20261	STIG15	RESIDU	0.	-0.002	0.	0.001	0.09	-1.	-1.	-0.	-1.	1.	0.	0.01	-0.	0.	190.	-0.
20261	STIG15	RESIDU	0.	-0.175	0.	0.037	0.17	-106.	-70.	-5.	-39.	40.	0.	0.01	47.	20.	65.	-6.
20261	STIG10	RESIDU	0.	-0.002	0.	0.001	0.13	-1.	-1.	-0.	-0.	1.	0.	0.04	-0.	0.	173.	-0.
20261	STIG10	RESIDU	0.	-0.015	0.	0.005	0.22	-10.	-6.	-0.	-3.	4.	0.	0.06	3.	2.	84.	-1.
20261	STIG1S	RESIDU	0.	-0.002	0.	0.001	0.15	-1.	-1.	-0.	-1.	1.	0.	0.04	-0.	0.	166.	-0.
20261	STIG1S	RESIDU	0.	-0.008	0.	0.003	0.23	-6.	-3.	-0.	-2.	3.	0.	0.07	1.	1.	87.	-0.
20261	DEADV3	RESIDU	0.	-0.001	0.	0.001	0.26	-2.	-1.	-0.	-1.	1.	-0.	-0.03	-1.	0.	234.	-0.
20261	DEADV3	RESIDU	0.	-0.004	0.	0.004	0.37	-5.	-2.	-0.	-3.	3.	-0.	-0.04	-1.	0.	131.	-0.
20261	DEHTPM	RESIDU	0.	-0.001	0.	0.002	0.30	-2.	-0.	-0.	-1.	1.	-0.	0.00	-1.	0.	232.	-0.
20261	DEHTPM	RESIDU	0.	-0.003	0.	0.003	0.40	-4.	-1.	-0.	-2.	2.	-0.	0.01	-1.	0.	139.	-0.
20261	DES0A3	DISTIL	-0.002	0.	-0.002	0.003	0.24	-5.	0.	0.	-4.	2.	0.	-0.48	-0.	0.	151.	-0.
20261	DES0A3	DISTIL	-0.004	0.	-0.004	0.008	0.35	-13.	-0.	0.	-10.	4.	0.	-0.72	1.	0.	102.	-0.
20261	DES0A3	RESIDU	-0.002	0.	-0.002	0.003	0.24	-10.	-1.	-0.	-9.	1.	0.	-2.04	-0.	0.	146.	-0.
20261	DES0A3	RESIDU	-0.004	0.	-0.004	0.008	0.35	-27.	-2.	-0.	-25.	3.	0.	-2.56	1.	0.	97.	-0.
20261	GTS0AD	DISTIL	-0.001	0.	-0.001	0.003	0.27	-1.	-0.	0.	0.	1.	0.	0.52	0.	0.	121.	-0.
20261	GTS0AD	DISTIL	-0.002	0.	-0.002	0.004	0.32	-1.	-0.	0.	1.	2.	0.	0.56	1.	0.	71.	-0.
20261	GTRA08	DISTIL	0.	-0.001	0.	0.001	0.26	-0.	-0.	0.	1.	2.	0.	0.48	-0.	0.	173.	-0.
20261	GTRA08	DISTIL	0.	-0.003	0.	0.003	0.36	-2.	-1.	0.	1.	3.	1.	0.51	0.	0.	100.	-0.
20261	GTRA12	DISTIL	0.	-0.001	0.	0.001	0.26	-0.	-0.	0.	1.	2.	0.	0.48	-0.	0.	165.	-0.
20261	GTRA12	DISTIL	0.	-0.003	0.	0.003	0.36	-1.	-1.	0.	1.	3.	1.	0.51	0.	0.	97.	-0.
20261	GTRA16	DISTIL	0.	-0.001	0.	0.001	0.26	-0.	-0.	0.	1.	2.	0.	0.48	-0.	0.	171.	-0.
20261	GTRA16	DISTIL	0.	-0.003	0.	0.003	0.36	-1.	-1.	0.	1.	3.	1.	0.51	0.	0.	103.	-0.
20261	GTR208	DISTIL	0.	-0.001	0.	0.001	0.26	-1.	-0.	0.	0.	2.	0.	0.47	-0.	0.	153.	-0.
20261	GTR208	DISTIL	0.	-0.003	0.	0.003	0.34	-1.	-0.	0.	1.	3.	0.	0.49	0.	0.	92.	-0.
20261	GTR212	DISTIL	0.	-0.001	0.	0.001	0.26	-0.	-0.	0.	0.	2.	0.	0.47	-0.	0.	159.	-0.
20261	GTR212	DISTIL	0.	-0.003	0.	0.003	0.34	-1.	-3.	0.	1.	3.	0.	0.49	0.	0.	95.	-0.
20261	GTR216	DISTIL	0.	-0.001	0.	0.001	0.26	-0.	-0.	0.	0.	2.	0.	0.48	-0.	0.	161.	-0.
20261	GTR216	DISTIL	0.	-0.003	0.	0.003	0.35	-1.	-0.	0.	1.	3.	0.	0.50	0.	0.	97.	-0.
20261	GTRW08	DISTIL	0.	-0.002	0.	0.001	0.22	-1.	-0.	0.	0.	2.	0.	0.45	-0.	0.	184.	-0.
20261	GTRW08	DISTIL	0.	-0.005	0.	0.003	0.31	-2.	-1.	0.	1.	4.	1.	0.48	0.	0.	105.	-0.
20261	GTRW12	DISTIL	0.	-0.002	0.	0.001	0.23	-0.	-0.	0.	0.	2.	0.	0.46	-0.	0.	162.	-0.
20261	GTRW12	DISTIL	0.	-0.005	0.	0.004	0.33	-2.	-1.	0.	1.	4.	1.	0.49	0.	1.	103.	-0.
20261	GTRW16	DISTIL	0.	-0.002	0.	0.001	0.23	-0.	-0.	0.	0.	2.	0.	0.46	-1.	0.	158.	-0.
20261	GTRW16	DISTIL	0.	-0.004	0.	0.004	0.33	-2.	-1.	0.	1.	4.	1.	0.49	0.	0.	108.	-0.
20261	GTR308	DISTIL	0.	-0.002	0.	0.001	0.21	-1.	-0.	0.	0.	2.	0.	0.44	-0.	0.	163.	-0.
20261	GTR308	DISTIL	0.	-0.004	0.	0.003	0.28	-2.	-0.	0.	0.	3.	1.	0.45	0.	0.	98.	-0.
20261	GTR31	DISTIL	0.	-0.002	0.	0.001	0.23	-1.	-0.	0.	0.	2.	0.	0.46	-0.	0.	170.	-0.

HONEYWELL CASE PRINTING SYSTEM - P1108-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 5

FUEL UNITS

EMISSION UNITS=

COST = \$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS
LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				-----EMISSIONS-----				SAVINGS-----				CAPITL--ELECTRIC POWER---			
		ECS ****DIRECT****	TOTAL	FESR	DIRECT	TOTAL	NOX	SOX	PART	NOX	SOX	PART	EMSR	SAVING	TOTAL	COST	LAEC
		FUEL OIL+GAS	COAL OIL+GAS	COAL											EXPORT		SAVED
															MWH		
20261	GTR312	DISTIL	0.	-0.004	0.	0.003	0.32	-2.	-1.	0.	1.	3.	1.	0.48	0.	98.	-0.
20261	GTR316	DISTIL	0.	-0.002	0.	0.001	0.23	-1.	-0.	0.	0.	2.	0.	0.46	0.	178.	-0.
20261	GTR316	DISTIL	0.	-0.004	0.	0.003	0.32	-2.	-1.	0.	1.	3.	1.	0.48	0.	104.	-0.
20261	FCPADS	DISTIL	0.	-0.002	0.	0.001	0.25	0.	1.	0.	1.	2.	0.	0.72	0.	121.	-0.
20261	FCPADS	DISTIL	0.	-0.004	0.	0.004	0.36	-0.	1.	0.	2.	6.	1.	0.66	1.	79.	-0.
20261	FCMCDS	DISTIL	0.	-0.002	0.	0.001	0.23	-1.	0.	0.	-0.	2.	0.	0.44	-0.	138.	-0.
20261	FCMCDS	DISTIL	0.	-0.007	0.	0.008	0.36	-7.	1.	-0.	-2.	8.	1.	0.46	1.	95.	-1.
20461	STM141	RESIDU	0.	-0.076	0.	0.125	0.18	-26.	72.	-4.	34.	164.	-15.	0.26	36.	0.	-5.
20461	STM141	RESIDU	0.	-0.154	0.	0.255	0.28	-54.	41.	-8.	73.	244.	-10.	0.34	61.	20.	3.
20461	STM141	COAL-F	0.	-0.076	0.	0.125	0.18	-26.	-45.	-4.	38.	64.	8.	0.16	14.	0.	22.
20461	STM141	COAL-F	0.	-0.154	0.	0.255	0.28	-54.	-92.	-8.	78.	131.	16.	0.25	30.	20.	18.
20461	STM141	COAL-A	0.	-0.076	0.	0.125	0.18	100.	-45.	-4.	164.	64.	8.	0.34	22.	0.	12.
20461	STM141	COAL-A	0.	-0.154	0.	0.255	0.28	89.	-92.	-8.	221.	131.	16.	0.41	48.	20.	8.
20461	STM088	RESIDU	0.	-0.076	0.	0.125	0.18	-26.	72.	-4.	34.	164.	-15.	0.26	41.	0.	-11.
20461	STM088	RESIDU	0.	-0.121	0.	0.201	0.24	-43.	54.	-6.	57.	211.	-12.	0.31	54.	11.	-2.
20461	STM088	COAL-F	0.	-0.076	0.	0.125	0.18	-26.	-45.	-4.	38.	64.	8.	0.16	15.	0.	21.
20461	STM088	COAL-F	0.	-0.121	0.	0.201	0.24	-43.	-73.	-6.	61.	104.	13.	0.22	24.	11.	18.
20461	STM088	COAL-A	0.	-0.076	0.	0.125	0.18	100.	-45.	-4.	164.	64.	8.	0.34	24.	0.	10.
20461	STM088	COAL-A	0.	-0.121	0.	0.201	0.24	94.	-73.	-6.	197.	104.	13.	0.39	39.	11.	7.
20461	PFBSTM	COAL-P	0.	-0.077	0.	0.124	0.17	115.	-46.	5.	179.	64.	17.	0.37	13.	0.	25.
20461	PFBSTM	COAL-P	0.	-0.226	0.	0.366	0.33	124.	-136.	15.	314.	188.	50.	0.52	52.	37.	17.
20461	TISTMT	RESIDU	0.	-0.077	0.	0.123	0.17	-27.	71.	-4.	33.	163.	-16.	0.26	-4.	0.	45.
20461	TISTMT	RESIDU	0.	-0.294	0.	0.469	0.37	-103.	-15.	-15.	137.	378.	-2.	0.42	-21.	53.	48.
20461	TISTMT	COAL	0.	-0.077	0.	0.123	0.17	-27.	-46.	-4.	37.	63.	8.	0.16	-30.	0.	77.
20461	TISTMT	COAL	0.	-0.294	0.	0.469	0.37	-103.	-176.	-15.	143.	241.	30.	0.34	-60.	53.	87.
20461	TIHRSG	RESIDU	0.	-0.092	0.	0.109	0.15	-32.	66.	-5.	28.	157.	-17.	0.24	-32.	0.	82.
20461	TIHRSG	RESIDU	0.	-0.129	0.	0.152	0.19	-45.	51.	-6.	41.	186.	-15.	0.27	-45.	8.	82.
20461	TIHRSG	COAL	0.	-0.092	0.	0.109	0.15	-32.	-55.	-5.	32.	54.	7.	0.13	-66.	0.	123.
20461	TIHRSG	COAL	0.	-0.129	0.	0.152	0.19	-45.	-78.	-6.	45.	77.	10.	0.17	-78.	8.	107.
20461	STIRL	DISTIL	0.	-0.109	0.	0.092	0.13	36.	132.	15.	101.	242.	27.	0.53	27.	0.	16.
20461	STIRL	DISTIL	0.	-0.450	0.	0.381	0.28	-42.	36.	9.	225.	491.	58.	0.60	61.	59.	32.
20461	STIRL	RESIDU	0.	-0.109	0.	0.092	0.13	-38.	59.	-12.	22.	150.	-25.	0.21	27.	0.	12.
20461	STIRL	RESIDU	0.	-0.450	0.	0.381	0.28	-158.	-78.	-48.	103.	348.	-37.	0.32	61.	59.	28.
20461	STIRL	COAL	0.	-0.109	0.	0.092	0.13	-38.	-65.	-5.	27.	45.	6.	0.11	1.	0.	41.
20461	STIRL	COAL	0.	-0.450	0.	0.381	0.28	-158.	-270.	-23.	110.	184.	27.	0.25	3.	59.	39.
20461	HEGT85	COAL-A	0.	-0.136	0.	0.065	0.09	82.	-82.	-7.	147.	28.	5.	0.26	-16.	0.	85.
20461	HEGT85	COAL-A	0.	-1.088	0.	0.517	0.24	-111.	-653.	-54.	405.	225.	41.	0.34	-8.	132.	44.
20461	HEGT60	COAL-A	0.	-0.137	0.	0.064	0.09	80.	-82.	-7.	145.	27.	5.	0.25	-14.	0.	62.
20461	HEGT60	COAL-A	0.	-0.633	0.	0.293	0.20	-29.	-380.	-32.	269.	127.	23.	0.31	-8.	68.	46.
20461	HEGT00	COAL-A	0.	-0.142	0.	0.058	0.08	74.	-85.	-7.	138.	24.	5.	0.24	-11.	0.	89.
20461	HEGT00	COAL-A	0.	-0.327	0.	0.134	0.14	27.	-196.	-16.	175.	55.	11.	0.26	-4.	24.	46.
20461	FCMCCL	COAL	0.	-0.093	0.	0.108	0.15	41.	71.	5.	106.	180.	17.	0.43	-10.	0.	84.
20461	FCMCCL	COAL	0.	-0.403	0.	0.466	0.34	179.	307.	23.	458.	782.	75.	1.00	16.	63.	36.
20461	FCSTCL	COAL	0.	-0.088	0.	0.112	0.16	23.	40.	3.	88.	150.	15.	0.36	-7.	0.	50.
20461	FCSTCL	COAL	0.	-0.677	0.	0.857	0.42	178.	306.	23.	672.	1145.	113.	1.00	54.	125.	31.
20461	IGGTST	COAL	0.	-0.109	0.	0.092	0.13	-38.	-65.	4.	26.	44.	16.	0.12	-3.	0.	46.

HONEYWELL PAGE PRINTING SYSTEM - P1188-02

DATE 06/12/79
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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 6

FUEL UNITS
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL (SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING \$*****				- - - EMISSIONS SAVING \$ - - -				CAPITL--ELECTRIC POWER---			
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR SAVING	TOTAL COST
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EMSR SAVING	TOTAL EXPORT	LAEC SAVED
20461	IGOTST COAL	0.	-0.596	0.	0.503	0.31	-209.	-358.	20.	145.	243.	85. 0.31	39. 84. 31. 2.
20461	GTSCAR RESIDU	-0.615	0.512	-0.615	0.712	0.14	81.	76.	21.	145.	185.	33. 0.52	33. 0. 3. -2.
20461	GTSCAR RESIDU	-0.956	0.512	-0.956	1.378	0.31	-60.	-53.	18.	219.	421.	69. 0.54	90. 62. 20. -3.
20461	GTAC08 RESIDU	0.	-0.095	0.	0.105	0.15	-93.	64.	-11.	-37.	156.	-23. 0.14	35. 0. -1. -2.
20461	GTAC08 RESIDU	0.	-0.343	0.	0.378	0.31	-334.	-35.	-40.	-108.	334.	-31. 0.16	86. 49. 14. -1.
20461	GTAC12 RESIDU	0.	-0.093	0.	0.107	0.15	-85.	65.	-10.	-25.	156.	-23. 0.16	35. 0. -1. -2.
20461	GTAC12 RESIDU	0.	-0.409	0.	0.469	0.34	-373.	-61.	-45.	-98.	391.	-30. 0.20	96. 63. 16. -1.
20461	GTAC16 RESIDU	0.	-0.094	0.	0.107	0.15	-82.	65.	-10.	-23.	156.	-22. 0.16	34. 0. 0. -2.
20461	GTAC16 RESIDU	0.	-0.457	0.	0.521	0.35	-402.	-81.	-49.	-95.	425.	-29. 0.21	98. 73. 19. -1.
20461	GTWC16 RESIDU	0.	-0.107	0.	0.093	0.13	-88.	60.	-11.	-29.	151.	-24. 0.14	34. 0. 3. -3.
20461	GTWC16 RESIDU	0.	-0.567	0.	0.495	0.31	-468.	-124.	-57.	-134.	424.	-37. 0.17	114. 81. 20. -3.
20461	CC1626 RESIDU	0.	-0.106	0.	0.095	0.13	-77.	60.	-10.	-17.	151.	-22. 0.16	34. 0. 3. -3.
20461	CC1626 RESIDU	0.	-1.008	0.	0.898	0.37	-733.	-301.	-91.	-131.	696.	-39. 0.23	181. 160. 23. -5.
20461	CC1622 RESIDU	0.	-0.102	0.	0.099	0.14	-76.	62.	-9.	-16.	153.	-22. 0.16	34. 0. 2. -3.
20461	CC1622 RESIDU	0.	-0.871	0.	0.848	0.38	-651.	-246.	-80.	-108.	652.	-34. 0.24	159. 142. 23. -4.
20461	CC1222 RESIDU	0.	-0.101	0.	0.100	0.14	-75.	62.	-9.	-15.	153.	-22. 0.17	34. 0. 2. -2.
20461	CC1222 RESIDU	0.	-0.862	0.	0.855	0.38	-645.	-243.	-80.	-103.	655.	-33. 0.25	164. 142. 22. -3.
20461	CC0822 RESIDU	0.	-0.094	0.	0.107	0.15	-75.	65.	-9.	-15.	156.	-21. 0.17	34. 0. 0. -2.
20461	CC0822 RESIDU	0.	-0.650	0.	0.738	0.39	-518.	-157.	-63.	-80.	567.	-28. 0.26	139. 111. 19. -1.
20461	STIG15 RESIDU	0.	-0.166	0.	0.035	0.05	-100.	36.	-5.	-41.	125.	-20. 0.09	30. 0. 18. -5.
20461	STIG15 RESIDU	0.	-32.945	0.	6.889	0.17	-19895.	-13076.	-978.	-7330.	7706.	42. 0.01	3200. 3717. 38. -552.
20461	STIG10 RESIDU	0.	-0.151	0.	0.050	0.07	-97.	42.	-4.	-38.	132.	-19. 0.11	31. 0. 14. -5.
20461	STIG10 RESIDU	0.	-2.771	0.	0.913	0.22	-1790.	-1006.	-73.	-630.	910.	14. 0.07	316. 327. 34. -41.
20461	STIG15 RESIDU	0.	-0.144	0.	0.057	0.08	-98.	45.	-3.	-39.	135.	-18. 0.11	35. 0. 9. -4.
20461	STIG15 RESIDU	0.	-1.552	0.	0.610	0.23	-1059.	-518.	-36.	-379.	602.	9. 0.09	197. 184. 31. -22.
20461	DEADV3 RESIDU	0.	-0.121	0.	0.079	0.11	-146.	54.	-11.	-86.	143.	-24. 0.05	25. 0. 17. -4.
20461	DEADV3 RESIDU	0.	-1.200	0.	0.785	0.31	-1447.	-378.	-105.	-822.	656.	-56. -0.09	86. 167. 38. -23.
20461	DEHTPM RESIDU	0.	-0.085	0.	0.116	0.16	-135.	68.	-9.	-75.	160.	-21. 0.09	25. 0. 10. -3.
20461	DEHTPM RESIDU	0.	-0.478	0.	0.651	0.40	-761.	-89.	-50.	-405.	499.	-23. 0.05	63. 87. 29. -6.
20461	DES0A3 DISTIL	-0.643	0.512	-0.643	0.712	0.10	-170.	202.	26.	-111.	293.	12. 0.26	20. 0. 30. -11.
20461	DES0A3 DISTIL	-1.977	0.512	-1.977	2.741	0.28	-3576.	-14.	26.	-2874.	1146.	79. -0.64	42. 190. 52. -53.
20461	DES0A3 RESIDU	-0.643	0.512	-0.643	0.712	0.10	-592.	65.	20.	-528.	174.	32. -0.46	20. 0. 25. -5.
20461	DES0A3 RESIDU	-1.977	0.512	-1.977	2.741	0.28	-7826.	-437.	10.	-7109.	782.	142. -2.40	42. 190. 46. -37.
20461	GTSCAD DISTIL	-0.608	0.512	-0.608	0.712	0.15	125.	208.	26.	185.	300.	13. 0.71	36. 0. 2. -7.
20461	GTSCAD DISTIL	-0.913	0.512	-0.913	1.345	0.32	-4.	159.	26.	258.	587.	38. 0.69	97. 59. 19. -8.
20461	GTRA08 DISTIL	0.	-0.100	0.	0.100	0.14	8.	135.	15.	72.	244.	27. 0.49	33. 0. 7. -7.
20461	GTRA08 DISTIL	0.	-0.643	0.	0.645	0.36	-283.	-18.	6.	132.	686.	82. 0.53	118. 102. 26. -13.
20461	GTRA12 DISTIL	0.	-0.099	0.	0.102	0.14	8.	135.	15.	73.	245.	27. 0.49	32. 0. 7. -7.
20461	GTRA12 DISTIL	0.	-0.630	0.	0.647	0.36	-278.	-14.	6.	133.	684.	82. 0.53	118. 101. 26. -13.
20461	GTRA16 DISTIL	0.	-0.099	0.	0.102	0.14	7.	135.	15.	72.	245.	27. 0.49	32. 0. 8. -8.
20461	GTRA16 DISTIL	0.	-0.594	0.	0.612	0.36	-263.	-4.	7.	125.	655.	78. 0.53	109. 94. 26. -13.
20461	GTR208 DISTIL	0.	-0.099	0.	0.101	0.14	4.	135.	15.	69.	245.	27. 0.49	34. 0. 6. -7.
20461	GTR208 DISTIL	0.	-0.504	0.	0.512	0.34	-227.	21.	8.	100.	576.	68. 0.51	102. 76. 24. -11.
20461	GTR212 DISTIL	0.	-0.100	0.	0.100	0.14	5.	135.	15.	70.	244.	27. 0.49	33. 0. 7. -7.
20461	GTR212 DISTIL	0.	-0.546	0.	0.545	0.34	-244.	7.	8.	107.	606.	72. 0.52	106. 83. 25. -12.
20461	GTR211 DISTIL	0.	-0.098	0.	0.102	0.14	6.	13.	15.	71.	245.	27. 0.49	32. 0. 7. -7.

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DATE 06/12/79

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 7

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				*****CAPITL--ELECTRIC POWER---								
		DIRECT		TOTAL		DIRECT		TOTAL		EMSR SAVING		TOTAL COST LAEC						
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED				
20461	GTR216	DISTIL	0.	-0.547	0.	0.568	0.35	-245.	9.	8.	114.	619.	74.	0.52	105.	86.	25.	-12.
20461	GTRW08	DISTIL	0.	-0.117	0.	0.084	0.12	3.	130.	15.	68.	240.	27.	0.48	33.	0.	10.	-8.
20461	GTRW08	DISTIL	0.	-0.903	0.	0.649	0.31	-387.	-91.	2.	112.	757.	93.	0.49	146.	127.	29.	-19.
20461	GTRW12	DISTIL	0.	-0.112	0.	0.088	0.12	6.	131.	15.	70.	241.	27.	0.48	33.	0.	9.	-8.
20461	GTRW12	DISTIL	0.	-0.896	0.	0.705	0.33	-384.	-89.	2.	131.	786.	96.	0.51	151.	131.	28.	-18.
20461	GTRW16	DISTIL	0.	-0.112	0.	0.089	0.12	5.	132.	15.	70.	241.	27.	0.48	32.	0.	10.	-8.
20461	GTRW16	DISTIL	0.	-0.836	0.	0.668	0.33	-360.	-72.	3.	124.	750.	92.	0.51	140.	122.	29.	-17.
20461	GTR308	DISTIL	0.	-0.119	0.	0.081	0.11	-1.	129.	15.	63.	239.	27.	0.47	34.	0.	10.	-8.
20461	GTR308	DISTIL	0.	-0.693	0.	0.474	0.28	-303.	-32.	5.	73.	606.	74.	0.47	116.	91.	28.	-16.
20461	GTR312	DISTIL	0.	-0.111	0.	0.090	0.13	4.	132.	15.	69.	241.	27.	0.48	34.	0.	8.	-8.
20461	GTR312	DISTIL	0.	-0.742	0.	0.598	0.32	-322.	-46.	4.	109.	687.	64.	0.50	131.	107.	27.	-15.
20461	GTR316	DISTIL	0.	-0.112	0.	0.089	0.12	4.	132.	15.	69.	241.	27.	0.48	33.	0.	9.	-8.
20461	GTR316	DISTIL	0.	-0.735	0.	0.586	0.32	-319.	-44.	4.	105.	678.	83.	0.50	127.	105.	28.	-16.
20461	FCPADS	DISTIL	0.	-0.135	0.	0.065	0.09	36.	172.	17.	101.	282.	29.	0.53	23.	0.	37.	-12.
20461	FCPADS	DISTIL	0.	-2.047	0.	0.991	0.28	-320.	307.	26.	658.	1969.	205.	0.85	144.	266.	56.	-92.
20461	FCMCDs	DISTIL	0.	-0.113	0.	0.087	0.12	-46.	175.	15.	18.	284.	27.	0.47	22.	0.	33.	-11.
20461	FCMCDs	DISTIL	0.	-1.355	0.	1.048	0.36	-1230.	304.	-2.	-457.	1619.	140.	0.47	106.	207.	51.	-62.
20631	STM141	RESIDU	0.	-0.005	0.	0.009	0.10	-2.	13.	-0.	2.	19.	-3.	0.20	13.	0.	-147.	0.
20631	STM141	RESIDU	0.	-0.030	0.	0.049	0.31	-10.	4.	-1.	14.	44.	-1.	0.38	26.	8.	-3.	0.
20631	STM141	COAL-F	0.	-0.005	0.	0.009	0.10	-2.	-3.	-0.	3.	5.	1.	0.09	-2.	0.	144.	-1.
20631	STM141	COAL-F	0.	-0.030	0.	0.049	0.31	-10.	-18.	-1.	15.	25.	3.	0.29	13.	6.	37.	-0.
20631	STM141	COAL-A	0.	-0.005	0.	0.009	0.10	16.	-3.	-0.	21.	5.	1.	0.28	-1.	0.	113.	-1.
20631	STM141	COAL-A	0.	-0.030	0.	0.049	0.31	13.	-18.	-1.	38.	25.	3.	0.44	21.	8.	11.	1.
20631	STM088	RESIDU	0.	-0.005	0.	0.009	0.10	-2.	13.	-0.	2.	19.	-3.	0.20	13.	0.	-150.	0.
20631	STM088	RESIDU	0.	-0.024	0.	0.039	0.28	-8.	6.	-1.	11.	37.	-2.	0.35	23.	5.	-13.	0.
20631	STM088	COAL-F	0.	-0.005	0.	0.009	0.10	-2.	-3.	-0.	3.	5.	1.	0.09	-2.	0.	145.	-1.
20631	STM088	COAL-F	0.	-0.024	0.	0.039	0.28	-8.	-14.	-1.	12.	20.	3.	0.25	10.	5.	37.	0.
20631	STM088	COAL-A	0.	-0.005	0.	0.009	0.10	16.	-3.	-0.	21.	5.	1.	0.28	-1.	0.	112.	-1.
20631	STM088	COAL-A	0.	-0.024	0.	0.039	0.28	14.	-14.	-1.	34.	20.	3.	0.41	17.	5.	8.	1.
20631	PFBSTM	COAL-P	0.	-0.005	0.	0.009	0.09	16.	-3.	-0.	21.	4.	1.	0.28	-2.	0.	136.	-1.
20631	PFBSTM	COAL-P	0.	-0.044	0.	0.071	0.37	18.	-26.	2.	55.	37.	9.	0.54	17.	9.	42.	-0.
20631	TISTMT	RESIDU	0.	-0.005	0.	0.009	0.09	-2.	13.	-0.	2.	19.	-3.	0.20	2.	0.	40.	-1.
20631	TISTMT	RESIDU	0.	-0.045	0.	0.071	0.37	-16.	-2.	-2.	21.	57.	-0.	0.42	-21.	10.	126.	-7.
20631	TISTMT	COAL	0.	-0.005	0.	0.009	0.09	-2.	-3.	-0.	3.	4.	1.	0.08	-12.	0.	311.	-2.
20631	TISTMT	COAL	0.	-0.057	0.	0.091	0.40	-20.	-34.	-3.	28.	47.	6.	0.37	-46.	13.	154.	-9.
20631	TIHRSG	RESIDU	0.	-0.006	0.	0.008	0.08	-2.	13.	-0.	2.	18.	-3.	0.19	-5.	0.	169.	-2.
20631	TIHRSG	RESIDU	0.	-0.020	0.	0.023	0.19	-7.	8.	-1.	6.	28.	-2.	0.27	-26.	3.	231.	-5.
20631	TIHRSG	COAL	0.	-0.006	0.	0.008	0.08	-2.	-4.	-0.	2.	4.	1.	0.07	-22.	0.	493.	-3.
20631	TIHRSG	COAL	0.	-0.025	0.	0.030	0.22	-9.	-15.	-1.	9.	15.	2.	0.20	-50.	4.	306.	-8.
20631	STIRL	DISTIL	0.	-0.008	0.	0.006	0.07	8.	23.	2.	12.	30.	3.	0.50	10.	0.	-96.	-1.
20631	STIRL	DISTIL	0.	-0.068	0.	0.058	0.28	-6.	6.	1.	34.	75.	9.	0.60	23.	11.	45.	-3.
20631	STIRL	RESIDU	0.	-0.008	0.	0.006	0.07	-3.	13.	-0.	1.	18.	-3.	0.17	10.	0.	-100.	0.
20631	STIRL	RESIDU	0.	-0.068	0.	0.058	0.28	-24.	-12.	-7.	16.	53.	-5.	0.33	23.	11.	41.	-2.
20631	STIRL	COAL	0.	-0.008	0.	0.006	0.07	-3.	-5.	-0.	2.	3.	0.	0.06	-3.	0.	147.	-1.
20631	STIRL	COAL	0.	-0.087	0.	0.074	0.31	-31.	-52.	-4.	21.	36.	5.	0.27	1.	14.	78.	-4.
20631	HEGT85	COAL-A	0.	-0.010	0.	0.005	0.05	15.	-6.	-0.	20.	2.	0.	0.25	-9.	0.	247.	-2.

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS *

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

*****FUEL SAVING\$*****		*****EMISSIONS SAVING\$*****		CAPITL--ELECTRIC POWER---	
PROCS	ECS	ECS *****DIRECT*****	TOTAL-----FESR -----DIRECT-----	EMSR SAVING	TOTAL COST LAEC
		FUEL OIL+GAS COAL OIL+GAS COAL	NOX SOX PART NOX SOX PART	SAVING	EXPORT SAVED
20631	HEGT85	COAL-A 0.	-0.211 0. 0.100 0.26 -25. -127. -11. 75. 44. 8. 0.34 -30. 28. 106. -13.		
20631	HEGT60	COAL-A 0.	-0.010 0. 0.004 0.05 15. -6. -0. 20. 2. 0. 0.24 -8. 0. 241. -1.		
20631	HEGT60	COAL-A 0.	-0.123 0. 0.057 0.22 -9. -74. -6. 49. 25. 4. 0.32 -21. 16. 111. -8.		
20631	HEGT00	COAL-A 0.	-0.010 0. 0.004 0.04 15. -6. -0. 20. 2. 0. 0.24 -8. 0. 234. -1.		
20631	HEGT00	COAL-A 0.	-0.063 0. 0.026 0.16 2. -38. -3. 30. 11. 2. 0.27 -13. 7. 117. -4.		
20631	FCMCL	COAL 0.	-0.099 0. 0.069 0.28 27. 47. 3. 81. 139. 13. 1.00 -5. 14. 90. -6.		
20631	FCSTCL	COAL 0.	-0.153 0. 0.145 0.39 27. 47. 3. 123. 209. 21. 1.00 8. 27. 73. -7.		
20631	IGGTST	COAL 0.	-0.137 0. 0.076 0.26 -48. -82. 3. 21. 34. 15. 0.26 6. 19. 74. -5.		
20631	GTSOAR	RESIDU -0.085	0.078 -0.085 0.092 0.07 18. 15. 3. 22. 22. 4. 0.54 11. 0. -115. 0.		
20631	GTSOAR	RESIDU -0.145	0.078 -0.145 0.209 0.31 -6. -8. 3. 36. 64. 11. 0.55 32. 11. 23. -1.		
20631	GTAC08	RESIDU 0.	-0.037 0. 0.007 0.08 -2. 13. -0. 2. 18. -3. 0.18 11. 0. -126. 0.		
20631	GTAC08	RESIDU 0.	-0.052 0. 0.057 0.31 -45. -5. -5. -11. 51. -4. 0.20 30. 9. 14. -0.		
20631	GTAC12	RESIDU 0.	-0.007 0. 0.007 0.08 -2. 13. -0. 2. 18. -3. 0.19 11. 0. -127. 0.		
20631	GTAC12	RESIDU 0.	-0.062 0. 0.071 0.34 -51. -9. -6. -10. 59. -4. 0.23 34. 11. 19. -0.		
20631	GTAC16	RESIDU 0.	-0.007 0. 0.007 0.08 -2. 13. -0. 2. 18. -3. 0.18 11. 0. -125. 0.		
20631	GTAC16	RESIDU 0.	-0.069 0. 0.079 0.35 -56. -12. -7. -9. 65. -4. 0.24 36. 13. 23. -1.		
20631	GTWC16	RESIDU 0.	-0.007 0. 0.007 0.07 -3. 13. -0. 1. 18. -3. 0.18 11. 0. -117. 0.		
20631	GTWC16	RESIDU 0.	-0.086 0. 0.075 0.31 -66. -19. -8. -15. 64. -5. 0.19 39. 14. 25. -1.		
20631	CC1626	RESIDU 0.	-0.007 0. 0.007 0.07 -3. 13. -0. 1. 18. -3. 0.18 11. 0. -114. 0.		
20631	CC1626	RESIDU 0.	-0.153 0. 0.136 0.37 -106. -46. -13. -15. 106. -5. 0.25 63. 26. 31. -2.		
20631	CC1622	RESIDU 0.	-0.007 0. 0.007 0.08 -2. 13. -0. 1. 18. -3. 0.18 11. 0. -120. 0.		
20631	CC1622	RESIDU 0.	-0.132 0. 0.129 0.38 -93. -37. -12. -11. 99. -5. 0.26 56. 23. 32. -2.		
20631	CC1222	RESIDU 0.	-0.007 0. 0.007 0.08 -2. 13. -0. 1. 18. -3. 0.18 11. 0. -122. 0.		
20631	CC1222	RESIDU 0.	-0.131 0. 0.130 0.38 -93. -37. -12. -10. 100. -4. 0.27 58. 23. 30. -2.		
20631	CC0822	RESIDU 0.	-0.007 0. 0.007 0.08 -2. 13. -0. 2. 18. -3. 0.18 11. 0. -120. 0.		
20631	CC0822	RESIDU 0.	-0.099 0. 0.112 0.39 -73. -24. -9. -7. 86. -4. 0.28 49. 18. 26. -1.		
20631	STIG15	RESIDU 0.	-0.012 0. 0.002 0.03 -4. 11. -1. -0. 16. -3. 0.14 8. 0. -57. -0.		
20631	STIG15	RESIDU 0.	-3.005 0. 1.047 0.17 -3017. -1987. -149. -1108. 1171. 6. 0.01 1132. 566. 50. -123.		
20631	STIG10	RESIDU 0.	-0.011 0. 0.003 0.04 -4. 11. -1. -0. 16. -3. 0.15 11. 0. -117. 0.		
20631	STIG10	RESIDU 0.	-0.421 0. 0.139 0.22 -267. -153. -12. -90. 138. 2. 0.08 114. 51. 43. -9.		
20631	STIG15	RESIDU 0.	-0.010 0. 0.004 0.04 -4. 12. -1. -0. 17. -3. 0.15 11. 0. -119. 0.		
20631	STIG15	RESIDU 0.	-0.236 0. 0.093 0.23 -156. -79. -6. -52. 91. 1. 0.11 69. 29. 40. -5.		
20631	DEADV3	RESIDU 0.	-0.008 0. 0.006 0.06 -3. 12. -0. 1. 17. -3. 0.17 8. 0. -62. -0.		
20631	DEADV3	RESIDU 0.	-0.182 0. 0.119 0.31 -207. -57. -15. -112. 100. -8. -0.06 31. 27. 63. -8.		
20631	DEHTPM	RESIDU 0.	-0.006 0. 0.008 0.09 -2. 13. -0. 2. 18. -3. 0.19 8. 0. -69. -0.		
20631	DEHTPM	RESIDU 0.	-0.073 0. 0.099 0.40 -103. -13. -7. -49. 76. -3. 0.10 24. 15. 48. -3.		
20631	DES0A3	DISTIL -0.087	0.078 -0.087 0.092 0.05 25. 33. 4. 29. 38. 1. 0.75 9. 0. -70. -1.		
20631	DES0A3	DISTIL -0.300	0.078 -0.300 0.417 0.28 -503. -2. 4. -396. 174. 12. -0.54 15. 30. 84. -14.		
20631	DES0A3	RESIDU -0.087	0.078 -0.087 0.092 0.05 18. 14. 3. 22. 22. 4. 0.53 9. 0. -75. -0.		
20631	DES0A3	RESIDU -0.300	0.078 -0.300 0.417 0.28 -1105. -66. 1. -996. 119. 22. -2.18 15. 30. 79. -12.		
20631	GTSOAD	DISTIL -0.085	0.078 -0.085 0.092 0.08 25. 33. 4. 29. 38. 1. 0.75 11. 0. -126. -0.		
20631	GTSOAD	DISTIL -0.139	0.078 -0.139 0.204 0.32 3. 24. 4. 43. 89. 6. 0.71 35. 11. 19. -1.		
20631	GTRA08	DISTIL 0.	-0.007 0. 0.007 0.08 8. 23. 2. 12. 30. 3. 0.51 11. 0. -109. -1.		
20631	GTRA08	DISTIL 0.	-0.098 0. 0.098 0.36 -39. -3. 1. 24. 104. 12. 0.54 41. 17. 36. -3.		
20631	GTRA12	DISTIL 0.	-0.007 0. 0.007 0.08 8. 23. 2. 12. 30. 3. 0.51 11. 0. -109. -1.		
20631	GTRA12	DISTIL 0.	-0.096 0. 0.098 0.36 -39. -3. 1. 24. 104. 12. 0.54 42. 17. 34. -3.		

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1 FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				*****CAPITL--ELECTRIC POWER---							
		ECS	*****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR SAVING	TOTAL	COST	LAEC	SAVED					
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	MWH				
20631	OTRA16	DISTIL	0.	-0.007	0.	0.007	0.08	8.	23.	2.	12.	30.	3. 0.51	10.	0.	-107.	-1.
20631	OTRA16	DISTIL	0.	-0.090	0.	0.093	0.36	-36.	-1.	1.	23.	100.	12. 0.54	39.	16.	35.	-3.
20631	OTR208	DISTIL	0.	-0.007	0.	0.007	0.08	8.	23.	2.	12.	30.	3. 0.51	11.	0.	-115.	-1.
20631	OTR208	DISTIL	0.	-0.077	0.	0.078	0.34	-31.	3.	1.	19.	88.	10. 0.53	37.	13.	28.	-2.
20631	OTR212	DISTIL	0.	-0.007	0.	0.007	0.08	8.	23.	2.	12.	30.	3. 0.51	11.	0.	-112.	-1.
20631	OTR212	DISTIL	0.	-0.083	0.	0.083	0.34	-33.	1.	1.	20.	92.	11. 0.53	38.	14.	31.	-2.
20631	OTR216	DISTIL	0.	-0.007	0.	0.007	0.08	8.	23.	2.	12.	30.	3. 0.51	11.	0.	-111.	-1.
20631	OTR216	DISTIL	0.	-0.083	0.	0.086	0.35	-34.	1.	1.	21.	94.	11. 0.54	37.	15.	33.	-3.
20631	OTRW08	DISTIL	0.	-0.008	0.	0.006	0.06	7.	22.	2.	12.	30.	3. 0.50	10.	0.	-104.	-1.
20631	OTRW08	DISTIL	0.	-0.137	0.	0.099	0.31	-55.	-14.	0.	21.	115.	14. 0.51	52.	21.	37.	-4.
20631	OTRW12	DISTIL	0.	-0.008	0.	0.006	0.07	8.	23.	2.	12.	30.	3. 0.50	10.	0.	-106.	-1.
20631	OTRW12	DISTIL	0.	-0.136	0.	0.107	0.33	-55.	-14.	0.	24.	119.	15. 0.52	53.	21.	36.	-4.
20631	OTRW16	DISTIL	0.	-0.008	0.	0.006	0.07	8.	23.	2.	12.	30.	3. 0.50	10.	0.	-103.	-1.
20631	OTRW16	DISTIL	0.	-0.127	0.	0.101	0.33	-51.	-11.	0.	22.	114.	14. 0.52	49.	20.	37.	-4.
20631	OTR308	DISTIL	0.	-0.008	0.	0.006	0.06	7.	22.	2.	12.	30.	3. 0.50	11.	0.	-109.	-1.
20631	OTR308	DISTIL	0.	-0.105	0.	0.072	0.28	-42.	-5.	1.	15.	92.	11. 0.49	41.	15.	34.	-3.
20631	OTR312	DISTIL	0.	-0.008	0.	0.006	0.07	8.	23.	2.	12.	30.	3. 0.50	11.	0.	-110.	-1.
20631	OTR312	DISTIL	0.	-0.113	0.	0.091	0.32	-45.	-7.	1.	20.	104.	13. 0.51	47.	18.	33.	-3.
20631	OTR316	DISTIL	0.	-0.008	0.	0.006	0.07	8.	23.	2.	12.	30.	3. 0.50	10.	0.	-105.	-1.
20631	OTR316	DISTIL	0.	-0.112	0.	0.089	0.32	-45.	-7.	1.	20.	103.	13. 0.51	45.	17.	35.	-3.
20631	FCPADS	DISTIL	0.	-0.009	0.	0.005	0.05	7.	22.	2.	12.	30.	3. 0.49	10.	0.	-82.	-1.
20631	FCPADS	DISTIL	0.	-0.311	0.	0.151	0.28	-49.	41.	4.	99.	293.	31. 0.84	51.	42.	79.	-20.
20631	FCMCDS	DISTIL	0.	-0.098	0.	0.006	0.07	8.	23.	2.	12.	30.	3. 0.50	10.	0.	-84.	-1.
20631	FCMCDS	DISTIL	0.	-0.206	0.	0.109	0.36	-176.	40.	-0.	-58.	240.	21. 0.49	38.	33.	75.	-14.
20821	STM141	RESIDU	0.	-0.016	0.	0.027	0.24	-20.	7.	-1.	-7.	28.	-2. 0.21	5.	0.	12.	-0.
20821	STM141	RESIDU	0.	-0.020	0.	0.033	0.28	-21.	5.	-1.	-5.	32.	-1. 0.25	7.	1.	8.	0.
20821	STM141	COAL-F	0.	-0.016	0.	0.027	0.24	-20.	-10.	-1.	-8.	14.	2. 0.10	-2.	0.	53.	0.
20821	STM141	COAL-F	0.	-0.020	0.	0.033	0.28	-21.	-12.	-1.	-4.	17.	2. 0.15	1.	1.	34.	1.
20821	STM141	COAL-A	0.	-0.016	0.	0.027	0.24	-2.	-10.	-1.	12.	14.	2. 0.29	0.	0.	40.	0.
20821	STM141	COAL-A	0.	-0.020	0.	0.033	0.28	-3.	-12.	-1.	14.	17.	2. 0.33	3.	1.	22.	1.
20821	STM088	RESIDU	0.	-0.016	0.	0.026	0.24	-20.	7.	-1.	-7.	28.	-2. 0.21	6.	0.	3.	0.
20821	STM088	COAL-F	0.	-0.016	0.	0.026	0.24	-20.	-10.	-1.	-6.	14.	2. 0.10	1.	0.	35.	1.
20821	STM088	COAL-A	0.	-0.016	0.	0.026	0.24	-2.	-10.	-1.	11.	14.	2. 0.29	3.	0.	22.	1.
20821	PFBSTM	COAL-P	0.	-0.016	0.	0.026	0.24	1.	-10.	1.	15.	14.	4. 0.35	-4.	0.	66.	-0.
20821	PFBSTM	COAL-P	0.	-0.030	0.	0.048	0.33	2.	-18.	2.	27.	25.	6. 0.46	1.	3.	38.	0.
20821	TISTMT	RESIDU	0.	-0.016	0.	0.026	0.24	-20.	7.	-1.	-7.	28.	-2. 0.21	-8.	0.	89.	-2.
20821	TISTMT	RESIDU	0.	-0.038	0.	0.051	0.37	-28.	-2.	-2.	3.	49.	-0. 0.36	-15.	5.	78.	-3.
20821	TISTMT	COAL	0.	-0.016	0.	0.026	0.24	-20.	-10.	-1.	-8.	13.	2. 0.09	-16.	0.	141.	-2.
20821	TISTMT	COAL	0.	-0.038	0.	0.061	0.37	-28.	-23.	-2.	4.	31.	4. 0.27	-24.	5.	97.	-3.
20821	TIHRSG	RESIDU	0.	-0.017	0.	0.020	0.18	-20.	7.	-1.	-9.	24.	-2. 0.14	-15.	0.	129.	-3.
20821	TIHRSG	COAL	0.	-0.017	0.	0.020	0.18	-20.	-10.	-1.	-8.	10.	1. 0.03	-22.	0.	171.	-3.
20821	STIRL	DISTIL	0.	-0.020	0.	0.022	0.20	-11.	16.	2.	3.	39.	4. 0.50	5.	0.	19.	-1.
20821	STIRL	DISTIL	0.	-0.058	0.	0.065	0.34	-20.	5.	1.	20.	72.	9. 0.60	10.	8.	27.	-1.
20821	STIRL	RESIDU	0.	-0.020	0.	0.022	0.20	-21.	5.	-2.	-8.	26.	-3. 0.16	5.	0.	15.	-0.
20821	STIRL	RESIDU	0.	-0.058	0.	0.065	0.34	-35.	-10.	-6.	4.	54.	-4. 0.32	10.	8.	23.	-0.
20821	STIRL	COAL	0.	-0.020	0.	0.022	0.20	-21.	-12.	-1.	-8.	11.	2. 0.05	-2.	0.	56.	-0.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING \$****				- - - EMISSIONS SAVINGS - - -				CAPITL--ELECTRIC POWER---			
		ECS	****DIRECT*****	-----TOTAL-----	-----FESR-----	-----DIRECT-----	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	SAVED
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	MWH
20821	STIRL	COAL	0.	-0.058	0.	0.065	0.34	-35.	-35.	-3.	5.	32.	4. 0.25
20821	HEGT85	COAL-A	0.	-0.021	0.	0.021	0.20	-5.	-13.	-1.	9.	11.	1. 0.23
20821	HEGT85	COAL-A	0.	-0.066	0.	0.067	0.34	-15.	-39.	-3.	28.	33.	5. 0.37
20821	HEGT60	COAL-A	0.	-0.029	0.	0.013	0.12	-6.	-17.	-1.	7.	6.	1. 0.15
20821	HEGT60	COAL-A	0.	-0.083	0.	0.038	0.20	-18.	-50.	-4.	21.	17.	3. 0.25
20821	HEGT00	COAL-A	0.	-0.030	0.	0.012	0.11	-8.	-18.	-2.	6.	5.	1. 0.13
20821	HEGT00	COAL-A	0.	-0.043	0.	0.018	0.14	-11.	-26.	-2.	9.	7.	1. 0.16
20821	FCMCCL	COAL	0.	-0.020	0.	0.023	0.21	-6.	15.	1.	8.	38.	4. 0.54
20821	FCMCCL	COAL	0.	-0.053	0.	0.061	0.34	9.	40.	3.	45.	102.	10. 1.00
20821	FCSTCL	COAL	0.	-0.019	0.	0.024	0.22	-9.	8.	1.	4.	32.	3. 0.43
20821	FCSTCL	COAL	0.	-0.088	0.	0.112	0.42	9.	40.	3.	73.	149.	15. 1.00
20821	IGGTST	COAL	0.	-0.023	0.	0.019	0.18	-22.	-14.	1.	-9.	9.	3. 0.04
20821	IGGTST	COAL	0.	-0.078	0.	0.066	0.31	-42.	-47.	3.	5.	32.	11. 0.26
20821	GTSGAR	RESIDU	-0.089	0.067	-0.089	0.109	0.19	-7.	7.	3.	6.	30.	5. 0.45
20821	GTSGAR	RESIDU	-0.125	0.067	-0.125	0.180	0.31	-22.	-7.	2.	14.	55.	9. 0.50
20821	GTAC08	RESIDU	0.	-0.020	0.	0.022	0.20	-34.	5.	-2.	-21.	26.	-3. 0.02
20821	GTAC08	RESIDU	0.	-0.045	0.	0.049	0.31	-58.	-5.	-5.	-28.	44.	-4. 0.08
20821	GTAC12	RESIDU	0.	-0.020	0.	0.123	0.21	-32.	5.	-2.	-19.	26.	-3. 0.04
20821	GTAC12	RESIDU	0.	-0.053	0.	0.061	0.34	-63.	-8.	-6.	-27.	51.	-4. 0.13
20821	GTAC16	RESIDU	0.	-0.020	0.	0.023	0.21	-32.	5.	-2.	-19.	26.	-3. 0.05
20821	GTAC16	RESIDU	0.	-0.060	0.	0.068	0.35	-67.	-11.	-6.	-27.	55.	-4. 0.15
20821	GTWC16	RESIDU	0.	-0.023	0.	0.020	0.18	-33.	4.	-2.	-20.	25.	-3. 0.02
20821	GTWC16	RESIDU	0.	-0.074	0.	0.065	0.31	-75.	-16.	-7.	-32.	55.	-5. 0.10
20821	CC1626	RESIDU	0.	-0.022	0.	0.020	0.18	-31.	4.	-2.	-18.	25.	-3. 0.05
20821	CC1626	RESIDU	0.	-0.132	0.	0.117	0.37	-110.	-39.	-12.	-31.	91.	-5. 0.19
20821	CC1622	RESIDU	0.	-0.022	0.	0.021	0.19	-30.	5.	-2.	-17.	25.	-3. 0.05
20821	CC1622	RESIDU	0.	-0.114	0.	0.111	0.38	-99.	-32.	-10.	-28.	85.	-4. 0.20
20821	CC1222	RESIDU	0.	-0.021	0.	0.021	0.19	-30.	5.	-2.	-17.	25.	-3. 0.06
20821	CC1222	RESIDU	0.	-0.113	0.	0.112	0.38	-99.	-32.	-10.	-28.	86.	-4. 0.21
20821	CC0822	RESIDU	0.	-0.020	0.	0.023	0.21	-30.	5.	-2.	-17.	26.	-3. 0.06
20821	CC0822	RESIDU	0.	-0.085	0.	0.096	0.39	-82.	-21.	-8.	-25.	74.	-4. 0.21
20821	STIG15	RESIDU	0.	-0.035	0.	0.007	0.07	-36.	-1.	-1.	-23.	19.	-3. -0.06
20821	STIG15	RESIDU	0.	-4.299	0.	0.899	0.17	-2611.	-1706.	-128.	-971.	1006.	5. 0.01
20821	STIG10	RESIDU	0.	-0.032	0.	0.011	0.10	-35.	1.	-1.	-22.	21.	-2. -0.04
20821	STIG10	RESIDU	0.	-0.362	0.	0.119	0.22	-248.	-131.	-10.	-97.	119.	2. 0.05
20821	STIG15	RESIDU	0.	-0.031	0.	0.012	0.11	-35.	1.	-1.	-22.	21.	-2. -0.03
20821	STIG15	RESIDU	0.	-0.202	0.	0.080	0.23	-153.	-68.	-5.	-64.	79.	1. 0.05
20821	DEADV3	RESIDU	0.	-0.021	0.	0.022	0.20	-44.	5.	-2.	-31.	26.	-3. -0.08
20821	DEADV3	RESIDU	0.	-0.085	0.	0.091	0.37	-136.	-21.	-8.	-80.	71.	-4. -0.06
20821	DEHTPM	RESIDU	0.	-0.018	0.	0.025	0.22	-43.	6.	-2.	-30.	27.	-3. -0.06
20821	DEHTPM	RESIDU	0.	-0.062	0.	0.085	0.40	-114.	-12.	-7.	-67.	65.	-3. -0.03
20821	DESOA3	DISTIL	-0.088	0.067	-0.088	0.109	0.19	-64.	26.	3.	-51.	46.	2. -0.02
20821	DESOA3	DISTIL	-0.155	0.067	-0.155	0.242	0.36	-286.	15.	3.	-231.	106.	7. -0.55
20821	DESOA3	RESIDU	-0.088	0.067	-0.088	0.109	0.19	-149.	7.	3.	-135.	30.	5. -1.09
20821	DESOA3	RESIDU	-0.155	0.067	-0.155	0.242	0.36	-620.	-18.	2.	-563.	77.	12. -2.20
20821	GTSGAL	STIL	-0.087	0.067	-0.087	0.109	0.20	-1.	26.	3.	12.	47.	2. 0.66

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GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 11

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING***** - - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****		TOTAL-----		FESR -----		DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC SAVED			
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART								
20821	GTSOAD	DISTIL	-0.119	0.067	-0.119	0.176	0.32	-15.	21.	3.	19.	77.	5.	0.66	11.	6.	21.	-1.
20821	GTRA08	DISTIL	0.	-0.021	0.	0.021	0.19	-18.	15.	2.	-4.	39.	4.	0.42	4.	0.	24.	-1.
20821	GTRA08	DISTIL	0.	-0.084	0.	0.084	0.36	-51.	-2.	1.	3.	90.	11.	0.49	13.	12.	29.	-2.
20821	GTRA12	DISTIL	0.	-0.021	0.	0.022	0.20	-18.	15.	2.	-4.	39.	4.	0.42	4.	0.	24.	-1.
20821	GTRA12	DISTIL	0.	-0.082	0.	0.084	0.36	-51.	-2.	1.	3.	89.	11.	0.50	13.	12.	29.	-2.
20821	GTRA16	DISTIL	0.	-0.021	0.	0.022	0.20	-18.	15.	2.	-4.	39.	4.	0.42	4.	0.	25.	-1.
20821	GTRA16	DISTIL	0.	-0.078	0.	0.080	0.36	-49.	-1.	2.	86.	10.	0.49	12.	11.	30.	-2.	
20821	GTR208	DISTIL	0.	-0.021	0.	0.021	0.20	-18.	15.	2.	-5.	39.	4.	0.42	4.	0.	22.	-1.
20821	GTR208	DISTIL	0.	-0.066	0.	0.067	0.34	-44.	3.	1.	-1.	75.	9.	0.47	12.	8.	26.	-1.
20821	GTR212	DISTIL	0.	-0.021	0.	0.021	0.19	-18.	15.	2.	-5.	39.	4.	0.42	4.	0.	23.	-1.
20821	GTR212	DISTIL	0.	-0.071	0.	0.071	0.34	-46.	1.	1.	-0.	79.	9.	0.48	12.	9.	28.	-1.
20821	GTR216	DISTIL	0.	-0.021	0.	0.022	0.20	-18.	15.	2.	-4.	39.	4.	0.42	4.	0.	23.	-1.
20821	GTR216	DISTIL	0.	-0.071	0.	0.074	0.35	-46.	1.	1.	1.	81.	10.	0.49	12.	10.	28.	-1.
20821	GTRW08	DISTIL	0.	-0.025	0.	0.018	0.16	-19.	14.	2.	-5.	38.	4.	0.40	4.	0.	29.	-1.
20821	GTRW08	DISTIL	0.	-0.118	0.	0.085	0.31	-65.	-12.	0.	0.	99.	12.	0.46	16.	15.	33.	-3.
20821	GTRW12	DISTIL	0.	-0.024	0.	0.019	0.17	-18.	15.	2.	-4.	38.	4.	0.41	4.	0.	28.	-1.
20821	GTRW12	DISTIL	0.	-0.117	0.	0.092	0.33	-64.	-12.	0.	3.	103.	13.	0.48	16.	16.	32.	-2.
20821	GTRW16	DISTIL	0.	-0.024	0.	0.019	0.17	-18.	15.	2.	-5.	38.	4.	0.41	4.	0.	29.	-1.
20821	GTRW16	DISTIL	0.	-0.109	0.	0.087	0.33	-61.	-9.	0.	2.	98.	12.	0.48	15.	14.	32.	-2.
20821	GTR308	DISTIL	0.	-0.025	0.	0.017	0.16	-20.	14.	2.	-6.	37.	4.	0.39	4.	0.	27.	-1.
20821	GTR308	DISTIL	0.	-0.090	0.	0.062	0.28	-54.	-4.	1.	-6.	79.	10.	0.43	13.	10.	31.	-2.
20821	GTR312	DISTIL	0.	-0.024	0.	0.019	0.17	-19.	15.	2.	-5.	38.	4.	0.41	4.	0.	25.	-1.
20821	GTR312	DISTIL	0.	-0.097	0.	0.078	0.32	-56.	-6.	1.	-0.	90.	11.	0.47	14.	12.	30.	-2.
20821	GTR316	DISTIL	0.	-0.024	0.	0.019	0.17	-19.	15.	2.	-5.	38.	4.	0.41	4.	0.	27.	-1.
20821	GTR316	DISTIL	0.	-0.096	0.	0.078	0.32	-56.	-6.	1.	-1.	89.	11.	0.46	14.	12.	31.	-2.
20821	FCPADS	DISTIL	0.	-0.021	0.	0.022	0.20	-10.	26.	2.	4.	49.	5.	0.63	4.	0.	31.	-1.
20821	FCPADS	DISTIL	0.	-0.092	0.	0.096	0.38	-22.	40.	3.	39.	143.	14.	0.86	12.	14.	43.	-4.
20821	FCMCDS	DISTIL	0.	-0.024	0.	0.019	0.17	-29.	24.	2.	-16.	47.	4.	0.39	4.	0.	37.	-1.
20821	FCMCDS	DISTIL	0.	-0.177	0.	0.137	0.36	-175.	40.	-0.	-74.	211.	18.	0.45	13.	25.	51.	-8.
20	FCMCDS	DISTIL	-10.525	-82.511	-10.525	60.587	27.70	-62168.	-19890.	-2070.	-16800.	55687.	2823.	0.24	11644.	10922.	46268.	-1988.
22601	STM141	RESIDU	0.	-0.016	0.	0.026	0.16	-5.	17.	-1.	7.	36.	-4.	0.25	9.	0.	-13.	-0.
22601	STM141	RESIDU	0.	-0.025	0.	0.041	0.23	-8.	13.	-1.	12.	45.	-3.	0.30	13.	2.	-7.	0.
22601	STM141	COAL-F	0.	-0.016	0.	0.026	0.16	-5.	-9.	-1.	8.	13.	2.	0.15	-1.	0.	53.	-0.
22601	STM141	COAL-F	0.	-0.025	0.	0.041	0.23	-9.	-15.	-1.	13.	21.	3.	0.21	4.	2.	25.	1.
22601	STM141	COAL-A	0.	-0.016	0.	0.026	0.16	23.	-9.	-1.	36.	13.	2.	0.33	2.	0.	33.	0.
22601	STM141	COAL-A	0.	-0.025	0.	0.041	0.23	22.	-15.	-1.	43.	21.	3.	0.38	8.	2.	8.	1.
22601	STM088	RESIDU	0.	-0.016	0.	0.026	0.16	-5.	17.	-1.	7.	36.	-4.	0.25	10.	0.	-18.	-0.
22601	STM088	RESIDU	0.	-0.019	0.	0.030	0.18	-6.	16.	-1.	8.	38.	-3.	0.27	12.	1.	-20.	0.
22601	STM088	COAL-F	0.	-0.016	0.	0.026	0.16	-5.	-9.	-1.	8.	13.	2.	0.15	0.	0.	44.	0.
22601	STM088	COAL-F	0.	-0.018	0.	0.030	0.18	-8.	-11.	-1.	9.	16.	2.	0.17	3.	1.	23.	1.
22601	STM088	COAL-A	0.	-0.016	0.	0.026	0.16	23.	-9.	-1.	36.	13.	2.	0.33	3.	0.	24.	1.
22601	STM088	COAL-A	0.	-0.018	0.	0.030	0.18	22.	-11.	-1.	38.	16.	2.	0.35	7.	1.	4.	1.
22601	PFBSTM	COAL-P	0.	-0.016	0.	0.025	0.16	26.	-10.	1.	40.	13.	4.	0.37	-2.	0.	82.	-0.
22601	PFBSTM	COAL-P	0.	-0.041	0.	0.065	0.29	29.	-25.	3.	63.	33.	10.	0.49	5.	6.	30.	1.
22601	TISTMT	RESIDU	0.	-0.016	0.	0.025	0.16	-6.	17.	-1.	7.	35.	-4.	0.25	-5.	0.	73.	-2.
22601	TISTMT	RESIDU	0.	-0.055	0.	0.087	0.34	-19.	1.	-3.	25.	73.	-1.	0.39	-18.	9.	75.	-5.

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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FUEL UNITS *
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING S*****			*****EMISSIONS SAVING S*****			*****CAPITL--ELECTRIC POWER---		
		ECS	*****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART
22601	TISTMT	COAL	0.	-0.016	0.	0.025	0.16	-6.	-10.	-1.
22601	TISTMT	COAL	0.	-0.055	0.	0.087	0.34	-19.	-33.	-3.
22601	TIHRSG	RESIDU	0.	-0.022	0.	0.020	0.12	-8.	15.	-1.
22601	TIHRSG	RESIDU	0.	-0.035	0.	0.032	0.17	-12.	9.	-2.
22601	TIHRSG	COAL	0.	-0.022	0.	0.020	0.12	-8.	-13.	-1.
22601	TIHRSG	COAL	0.	-0.035	0.	0.032	0.17	-12.	-21.	-2.
22601	STIRL	DISTIL	0.	-0.023	0.	0.018	0.12	9.	31.	3.
22601	STIRL	DISTIL	0.	-0.093	0.	0.075	0.26	-8.	11.	2.
22601	STIRL	RESIDU	0.	-0.023	0.	0.018	0.12	-8.	14.	-2.
22601	STIRL	RESIDU	0.	-0.093	0.	0.075	0.26	-33.	-14.	-10.
22601	STIRL	COAL	0.	-0.023	0.	0.018	0.12	-8.	-14.	-1.
22601	STIRL	COAL	0.	-0.093	0.	0.075	0.26	-33.	-56.	-5.
22601	HEGT85	COAL-A	0.	-0.034	0.	0.008	0.05	18.	-20.	-2.
22601	HEGT85	COAL-A	0.	-0.519	0.	0.118	0.16	-75.	-312.	-26.
22601	HEGT60	COAL-A	0.	-0.032	0.	0.009	0.06	18.	-19.	-2.
22601	HEGT60	COAL-A	0.	-0.199	0.	0.056	0.15	-16.	-119.	-10.
22601	HEGT00	COAL-A	0.	-0.031	0.	0.010	0.06	17.	-19.	-2.
22601	HEGT00	COAL-A	0.	-0.083	0.	0.026	0.12	4.	-50.	-4.
22601	FCMCCL	COAL	0.	-0.019	0.	0.022	0.14	8.	15.	1.
22601	FCMCCL	COAL	0.	-0.092	0.	0.106	0.34	40.	69.	5.
22601	FCSTCL	COAL	0.	-0.018	0.	0.023	0.15	5.	9.	1.
22601	FCSTCL	COAL	0.	-0.136	0.	0.169	0.40	40.	69.	5.
22601	IGGTST	COAL	0.	-0.023	0.	0.018	0.12	-8.	-14.	1.
22601	IGGTST	COAL	0.	-0.119	0.	0.094	0.29	-42.	-71.	5.
22601	GTSGAR	RESIDU	-0.138	0.116	-0.138	0.157	0.12	19.	17.	5.
22601	GTSGAR	RESIDU	-0.229	0.116	-0.229	0.323	0.29	-17.	-16.	4.
22601	GTAC08	RESIDU	0.	-0.019	0.	0.022	0.14	-19.	15.	-2.
22601	GTAC08	RESIDU	0.	-0.076	0.	0.086	0.31	-75.	-7.	-9.
22601	GTAC12	RESIDU	0.	-0.020	0.	0.022	0.14	-18.	15.	-2.
22601	GTAC12	RESIDU	0.	-0.096	0.	0.106	0.33	-87.	-15.	-10.
22601	GTAC16	RESIDU	0.	-0.020	0.	0.021	0.14	-17.	15.	-2.
22601	GTAC16	RESIDU	0.	-0.110	0.	0.118	0.34	-95.	-21.	-12.
22601	GTWC16	RESIDU	0.	-0.022	0.	0.019	0.12	-18.	14.	-2.
22601	GTWC16	RESIDU	0.	-0.128	0.	0.112	0.32	-106.	-28.	-13.
22601	CC1626	RESIDU	0.	-0.022	0.	0.019	0.12	-16.	14.	-2.
22601	CC1626	RESIDU	0.	-0.206	0.	0.178	0.36	-152.	-59.	-19.
22601	CC1622	RESIDU	0.	-0.021	0.	0.020	0.13	-16.	15.	-2.
22601	CC1622	RESIDU	0.	-0.177	0.	0.168	0.36	-135.	-48.	-17.
22601	CC1222	RESIDU	0.	-0.021	0.	0.020	0.13	-16.	15.	-2.
22601	CC1222	RESIDU	0.	-0.175	0.	0.168	0.37	-134.	-47.	-16.
22601	CC0822	RESIDU	0.	-0.020	0.	0.022	0.14	-16.	15.	-2.
22601	CC0822	RESIDU	0.	-0.130	0.	0.144	0.37	-107.	-29.	-13.
22601	STIG15	RESIDU	0.	-0.034	0.	0.007	0.05	-21.	19.	-1.
22601	STIG15	RESIDU	0.	-7.468	0.	1.562	0.17	-4510.	-2964.	-222.
22601	STIG10	RESIDU	0.	-0.031	0.	0.010	0.07	-20.	-8.	-1.
22601	STIG	RESIDU	0.	-0.628	0.	0.207	0.22	-406.	-2.	-17.

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DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 13

FUEL UNITS *

EMISSION UNITS=

COST

=\$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

*****FUEL SAVINGS*****		*****EMISSIONS SAVINGS*****		*****CAPITL-ELECTRIC POWER---	
PROCS	ECS	ECS	*****DIRECT*****	*****TOTAL*****	*****TOTAL*****
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX SOX PART NOX SOX PART
					EMSR SAVING TOTAL COST LAEC
					EXPORT SAVED
22601	STIG1S RESIDU	0.	-0.030	0.	0.012 0.07 -20. 11. -1. -8. 30. -4. 0.11 9. 0. -3. -1.
22601	STIG1S RESIDU	0.	-0.352	0.	0.138 0.23 -240. -117. -8. -86. 136. 2. 0.09 48. 42. 31. -8.
22601	DEADV3 RESIDU	0.	-0.027	0.	0.015 0.09 -31. 13. -2. -18. 31. -6. 0.04 6. 0. 12. -1.
22601	DEADV3 RESIDU	0.	-0.341	0.	0.189 0.29 -394. -113. -29. -227. 163. -16. -0.13 24. 46. 41. -7.
22601	DEHTPM RESIDU	0.	-0.019	0.	0.022 0.14 -30. 15. -2. -18. 34. -5. 0.07 6. 0. 8. -1.
22601	DEHTPM RESIDU	0.	-0.113	0.	0.128 0.36 -177. -22. -12. -102. 103. -7. -0.02 15. 19. 31. -2.
22601	DESOA3 DISTIL	-0.145	0.116	-0.145	0.157 0.08 -32. 46. 6. -19. 64. 2. 0.31 7. 0. 17. -2.
22601	DESOA3 DISTIL	-0.543	0.116	-0.543	0.729 0.25 -991. -19. 6. -798. 300. 20. -0.70 11. 54. 55. -16.
22601	DESOA3 RESIDU	-0.145	0.116	-0.145	0.157 0.08 -119. 15. 5. -106. 38. 7. -0.40 7. 0. 12. -1.
22601	DESOA3 RESIDU	-0.543	0.116	-0.543	0.729 0.25 -2159. -135. 1. -1962. 200. 38. -2.52 11. 54. 50. -12.
22601	GTSCAD DISTIL	-0.137	0.116	-0.137	0.157 0.13 29. 47. 6. 42. 65. 3. 0.71 10. 0. -9. -1.
22601	GTSCAD DISTIL	-0.213	0.116	-0.213	0.310 0.31 -2. 35. 6. 59. 135. 9. 0.68 24. 14. 19. -2.
22601	GTRA08 DISTIL	0.	-0.022	0.	0.019 0.12 3. 31. 3. 16. 53. 6. 0.49 8. 0. -1. -2.
22601	GTRA08 DISTIL	0.	-0.169	0.	0.149 0.34 -73. -11. 1. 29. 163. 20. 0.52 30. 26. 28. -4.
22601	GTRA12 DISTIL	0.	-0.021	0.	0.020 0.13 3. 31. 3. 16. 53. 6. 0.49 9. 0. -2. -2.
22601	GTRA12 DISTIL	0.	-0.162	0.	0.149 0.35 -71. -9. 1. 29. 161. 19. 0.52 29. 25. 28. -3.
22601	GTRA16 DISTIL	0.	-0.021	0.	0.020 0.13 3. 31. 3. 16. 53. 6. 0.49 8. 0. -0. -2.
22601	GTRA16 DISTIL	0.	-0.151	0.	0.140 0.34 -66. -5. 1. 28. 154. 18. 0.52 27. 23. 28. -3.
22601	GTR208 DISTIL	0.	-0.021	0.	0.020 0.13 2. 31. 3. 15. 53. 6. 0.48 9. 0. -4. -2.
22601	GTR208 DISTIL	0.	-0.126	0.	0.116 0.32 -56. 2. 2. 22. 134. 16. 0.50 25. 19. 25. -3.
22601	GTR212 DISTIL	0.	-0.022	0.	0.020 0.13 2. 31. 3. 15. 53. 6. 0.48 9. 0. -3. -2.
22601	GTR212 DISTIL	0.	-0.135	0.	0.124 0.33 -60. -1. 2. 23. 141. 17. 0.51 26. 20. 26. -3.
22601	GTR216 DISTIL	0.	-0.021	0.	0.020 0.13 2. 31. 3. 16. 54. 6. 0.49 9. 0. -2. -2.
22601	GTR216 DISTIL	0.	-0.136	0.	0.129 0.34 -60. -1. 2. 25. 144. 17. 0.51 26. 21. 27. -3.
22601	GTRW08 DISTIL	0.	-0.025	0.	0.016 0.10 2. 30. 3. 15. 52. 6. 0.48 8. 0. 3. -2.
22601	GTRW08 DISTIL	0.	-0.230	0.	0.150 0.30 -98. -28. -0. 24. 180. 22. 0.48 36. 32. 32. -5.
22601	GTRW12 DISTIL	0.	-0.024	0.	0.017 0.11 2. 30. 3. 16. 53. 6. 0.48 8. 0. 1. -2.
22601	GTRW12 DISTIL	0.	-0.224	0.	0.163 0.32 -95. -26. 0. 29. 185. 23. 0.50 37. 32. 31. -5.
22601	GTRW16 DISTIL	0.	-0.024	0.	0.018 0.11 2. 30. 3. 15. 53. 6. 0.48 8. 0. 2. -2.
22601	GTRW16 DISTIL	0.	-0.206	0.	0.153 0.32 -88. -21. 0. 27. 176. 22. 0.50 34. 30. 31. -5.
22601	GTR308 DISTIL	0.	-0.026	0.	0.015 0.10 1. 30. 3. 14. 52. 6. 0.47 9. 0. 1. -2.
22601	GTR308 DISTIL	0.	-0.183	0.	0.107 0.26 -79. -15. 1. 14. 144. 18. 0.46 29. 23. 31. -5.
22601	GTR312 DISTIL	0.	-0.023	0.	0.018 0.11 2. 30. 3. 15. 53. 6. 0.48 9. 0. -1. -2.
22601	GTR312 DISTIL	0.	-0.179	0.	0.136 0.32 -77. -13. 1. 24. 159. 19. 0.50 32. 26. 28. -4.
22601	GTR316 DISTIL	0.	-0.024	0.	0.018 0.11 2. 30. 3. 15. 53. 6. 0.48 8. 0. 1. -2.
22601	GTR316 DISTIL	0.	-0.177	0.	0.133 0.31 -76. -13. 1. 23. 157. 19. 0.49 30. 25. 29. -4.
22601	FCPADS DISTIL	0.	-0.028	0.	0.013 0.09 9. 39. 4. 22. 61. 6. 0.58 8. 0. 16. -2.
22601	FCPADS DISTIL	0.	-0.464	0.	0.225 0.28 -72. 70. 6. 149. 446. 47. 0.85 35. 61. 57. -21.
22601	FCMCDS DISTIL	0.	-0.023	0.	0.018 0.11 -8. 39. 3. 5. 62. 6. 0.47 8. 0. 12. -2.
22601	FCMCDS DISTIL	0.	-0.307	0.	0.238 0.36 -279. 69. -1. -104. 367. 32. 0.47 26. 47. 52. -14.
22	FCMCDS DISTIL	-2.092	-14.740	-2.092	10.342 13.19 -11437. -3671. -376. -3486. 9571. 475. 0.22 1714. 1958. 3320. -370.
24211	STM141 RESIDU	0.	-0.000	0.	0.006 0.99 -0. -0. -0. -0. 2. 3. 0. 0.99 -0. 0. 81. -0.
24211	STM141 RESIDU	0.	-0.000	0.	0.007 0.95 -0. -0. -0. -0. 2. 4. 0. 0.95 0. 0. 55. -0.
24211	STM141 COAL-F	0.	-0.000	0.	0.006 0.99 -0. -0. -0. -0. 2. 3. 0. 0.99 -3. 0. 220. -1.
24211	STM141 COAL-F	0.	-0.000	0.	0.007 0.95 -0. -0. -0. -0. 2. 4. 0. 0.94 -2. 0. 155. -0.
24211	STM141 COAL-A	0.	-0.000	0.	0.006 0.99 -0. -0. -0. -0. 2. 3. 0. 0.99 -3. 0. 190. -1.

HONEYWELL PAGE PRINTING SYSTEM - P118-03

DATE 06/12/79

ISE PEO-AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

PAGE 14

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****						*****EMISSIONS SAVINGS*****						CAPITL--ELECTRIC POWER---			
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		*****TOTAL*****		EMSR	SAVING	TOTAL	COST
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT	LAEC	
															MWH	SAVED	
24211	STM141	COAL-A	0.	-0.000	0.	0.007	0.95	-0.	-0.	-0.	2.	4.	0. 0.96	-2.	0.	124.	-0
24211	STM088	RESIDU	0.	0.	0.	0.005	0.81	0.	0.	0.	2.	3.	0. 0.81	0.	0.	58.	0
24211	STM088	COAL-F	0.	0.	0.	0.005	0.81	0.	0.	0.	2.	3.	0. 0.81	-2.	0.	167.	-0
24211	STM088	COAL-A	0.	0.	0.	0.005	0.81	0.	0.	0.	2.	3.	0. 0.81	-2.	0.	140.	-0
24211	PFBSTM	COAL-P	0.	-0.000	0.	0.006	0.98	-0.	-0.	-0.	2.	3.	0. 0.98	-5.	0.	277.	-1
24211	PFBSTM	COAL-P	0.	-0.002	0.	0.010	0.80	-0.	-1.	-0.	4.	5.	1. 0.85	-3.	1.	133.	-1
24211	TISTMT	COAL	0.	-0.000	0.	0.006	0.98	-0.	-0.	-0.	2.	3.	0. 0.98	-9.	0.	465.	-2
24211	TISTMT	COAL	0.	-0.004	0.	0.012	0.76	-1.	-2.	-0.	4.	7.	1. 0.74	-13.	1.	270.	-2
24211	TIHRS9	COAL	0.	-0.001	0.	0.005	0.83	-0.	-1.	-0.	2.	3.	0. 0.82	-12.	0.	562.	-2
24211	TIHRS9	COAL	0.	-0.002	0.	0.006	0.75	-1.	-1.	-0.	2.	3.	0. 0.74	-13.	0.	459.	-2
24211	STIRL	COAL	0.	-0.001	0.	0.005	0.81	-0.	-1.	-0.	2.	3.	0. 0.80	-3.	0.	229.	-1
24211	STIRL	COAL	0.	-0.009	0.	0.011	0.56	-3.	-5.	-0.	3.	6.	1. 0.53	-1.	1.	79.	-0
24211	HEGT85	COAL-A	0.	-0.003	0.	0.003	0.53	-0.	-2.	-0.	2.	2.	0. 0.60	-8.	0.	394.	-1
24211	HEGT85	COAL-A	0.	-0.071	0.	0.017	0.19	-13.	-42.	-4.	15.	5.	2. 0.28	-24.	8.	135.	-5
24211	HEGT60	COAL-A	0.	-0.033	0.	0.004	0.57	-0.	-2.	-0.	2.	2.	0. 0.64	-7.	0.	380.	-1
24211	HEGT60	COAL-A	0.	-0.023	0.	0.009	0.28	-4.	-14.	-1.	6.	4.	1. 0.35	-13.	2.	167.	-2
24211	HEGT00	COAL-A	0.	-0.003	0.	0.004	0.60	-0.	-2.	-0.	2.	2.	0. 0.66	-7.	0.	352.	-1
24211	HEGT00	COAL-A	0.	-0.008	0.	0.005	0.41	-1.	-5.	-0.	3.	3.	0. 0.47	-7.	1.	200.	-1
24211	FCSTCL	COAL	0.	-0.030	0.	0.006	0.16	-0.	-0.	-0.	12.	20.	2. 1.00	-8.	3.	127.	-2
24211	GTAC16	RESIDU	0.	-0.006	0.	0.000	0.01	-2.	-3.	-0.	-0.	1.	-0. 0.06	-0.	0.	102.	-0
24211	CC1626	RESIDU	0.	-0.005	0.	0.001	0.15	-2.	-2.	-0.	0.	1.	-0. 0.19	-0.	0.	118.	-0
24211	CC1622	RESIDU	0.	-0.006	0.	0.001	0.14	-2.	-2.	-0.	0.	1.	-0. 0.18	-0.	0.	112.	-0
24211	CC1222	RESIDU	0.	-0.006	0.	0.001	0.14	-2.	-2.	-0.	0.	1.	-0. 0.19	-0.	0.	109.	-0
24211	CC0822	RESIDU	0.	-0.006	0.	0.001	0.08	-2.	-2.	-0.	-0.	1.	-0. 0.13	-0.	0.	116.	-0
24211	STIG15	RESIDU	0.	-0.005	0.	0.001	0.16	-2.	-2.	-0.	0.	1.	-0. 0.21	-0.	0.	111.	-0
24211	STIG10	RESIDU	0.	-0.006	0.	0.001	0.11	-2.	-2.	-0.	0.	1.	-0. 0.16	-0.	0.	107.	-0
24211	STIG1S	RESIDU	0.	-0.006	0.	0.000	0.05	-2.	-2.	-0.	-0.	1.	-0. 0.10	-0.	0.	108.	-0
24211	DEADV3	RESIDU	0.	-0.006	0.	0.001	0.14	-2.	-2.	-0.	0.	1.	-0. 0.18	-1.	0.	153.	-0
24211	DEHTPM	RESIDU	0.	-0.006	0.	0.000	0.04	-2.	-2.	-0.	-0.	1.	-0. 0.09	-2.	0.	162.	-0
24211	DES0A3	DISTIL	-0.006	0.	-0.006	0.006	0.11	-0.	-1.	0.	2.	2.	0. 0.75	-0.	0.	120.	-0
24211	DES0A3	RESIDU	-0.006	0.	-0.006	0.006	0.11	-1.	-2.	-0.	1.	1.	0. 0.53	-0.	0.	113.	-0
24211	GTRA08	DISTIL	0.	-0.006	0.	0.001	0.10	-1.	-2.	-0.	1.	2.	0. 0.49	-1.	0.	121.	-0
24211	GTRA12	DISTIL	0.	-0.006	0.	0.001	0.11	-1.	-2.	-0.	1.	2.	0. 0.49	-0.	0.	117.	-0
24211	GTRA16	DISTIL	0.	-0.006	0.	0.001	0.08	-1.	-2.	-0.	1.	2.	0. 0.48	-1.	0.	122.	-0
24211	GTR208	DISTIL	0.	-0.006	0.	0.000	0.60	-1.	-2.	-0.	1.	2.	0. 0.43	-0.	0.	118.	-0
24211	GTR212	DISTIL	0.	-0.006	0.	0.000	0.03	-1.	-2.	-0.	1.	2.	0. 0.45	-0.	0.	119.	-0
24211	GTR216	DISTIL	0.	-0.006	0.	0.000	0.05	-1.	-2.	-0.	1.	2.	0. 0.46	-0.	0.	119.	-0
24211	GTRW08	DISTIL	0.	-0.006	0.	0.001	0.09	-1.	-2.	-0.	1.	2.	0. 0.48	-1.	0.	124.	-0
24211	GTRW12	DISTIL	0.	-0.006	0.	0.001	0.12	-1.	-2.	-0.	1.	2.	0. 0.50	-1.	0.	123.	-0
24211	GTRW16	DISTIL	0.	-0.006	0.	0.001	0.10	-1.	-2.	-0.	1.	2.	0. 0.49	-1.	0.	126.	-0
24211	GTR312	DISTIL	0.	-0.006	0.	0.000	0.06	-1.	-2.	-0.	1.	2.	0. 0.47	-0.	0.	120.	-0
24211	GTR316	DISTIL	0.	-0.006	0.	0.000	0.06	-1.	-2.	-0.	1.	2.	0. 0.46	-1.	0.	124.	-0
24211	FCPADS	DISTIL	0.	-0.005	0.	0.001	0.16	-1.	-2.	-0.	1.	2.	0. 0.52	-0.	0.	108.	-0
24211	FCMCDS	DISTIL	0.	-0.005	0.	0.001	0.22	-1.	-1.	-0.	1.	2.	0. 0.56	-0.	0.	100.	-0
24361	STM1	RESIDU	0.	-0.000	0.	0.019	0.99	-0.	-0.	-0.	6.	10.	1. 0.99	4.	0.	-1.	1
24361	STM	RESIDU	0.	-0.001	0.	0.020	0.97	-0.	-0.	-0.	6.	11.	1. 0.97	4.	0.	-24.	1

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

PAGE 15

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****						-----EMISSIONS SAVINGS-----						CAPITL--ELECTRIC POWER---				
		ECS	*****DIRECT*****	-----TOTAL-----	FESR	-----DIRECT-----	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	EXPORT	MWH	SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART						
24361	STM141	COAL-F	0.	-0.000	0.	0.019	0.99	-0.	-0.	-0.	6.	10.	1.	0.99	-2.	0.	64.	-0.
24361	STM141	COAL-F	0.	-0.001	0.	0.020	0.97	-0.	-0.	-0.	6.	11.	1.	0.97	-1.	0.	43.	0.
24361	STM141	COAL-A	0.	-0.000	0.	0.019	0.99	-0.	-0.	-0.	6.	10.	1.	0.99	0.	0.	38.	0.
24361	STM141	COAL-A	0.	-0.001	0.	0.020	0.97	-0.	-0.	-0.	6.	11.	1.	0.98	1.	0.	17.	1.
24361	STM088	RESIDU	0.	0.	0.	0.013	0.68	0.	0.	0.	4.	7.	1.	0.68	4.	0.	-14.	1.
24361	STM088	COAL-F	0.	0.	0.	0.013	0.68	0.	0.	0.	4.	7.	1.	0.68	-0.	0.	50.	0.
24361	STM088	COAL-A	0.	0.	0.	0.013	0.68	0.	0.	0.	4.	7.	1.	0.68	1.	0.	28.	0.
24361	PFBSTM	COAL-P	0.	-0.001	0.	0.019	0.97	-0.	-0.	-0.	6.	10.	1.	0.97	-4.	0.	100.	-0.
24361	PFBSTM	COAL-P	0.	-0.008	0.	0.030	0.79	-1.	-5.	-0.	12.	16.	2.	0.84	-1.	2.	47.	-0.
24361	TISTMT	COAL	0.	-0.000	0.	0.019	0.98	-0.	-0.	-0.	6.	10.	1.	0.98	-13.	0.	216.	-2.
24361	TISTMT	COAL	0.	-0.013	0.	0.039	0.75	-5.	-8.	-1.	12.	21.	2.	0.73	-21.	3.	138.	-3.
24361	TIHRSG	COAL	0.	-0.004	0.	0.015	0.78	-1.	-2.	-0.	5.	8.	1.	0.77	-18.	0.	275.	-2.
24361	TIHRSG	COAL	0.	-0.011	0.	0.020	0.64	-4.	-7.	-1.	6.	10.	1.	0.61	-22.	1.	212.	-3.
24361	STIRL	COAL	0.	-0.004	0.	0.015	0.80	-1.	-2.	-0.	5.	8.	1.	0.79	-3.	0.	84.	-0.
24361	STIRL	COAL	0.	-0.032	0.	0.037	0.54	-11.	-19.	-2.	11.	19.	3.	0.50	-0.	5.	42.	-0.
24361	HEGT60	COAL-A	0.	-0.010	0.	0.010	0.50	-1.	-6.	-0.	5.	5.	1.	0.57	-9.	0.	165.	-1.
24361	HEGT60	COAL-A	0.	-0.120	0.	0.026	0.18	-22.	-72.	-6.	25.	8.	3.	0.26	-21.	12.	84.	-4.
24361	HEGT00	COAL-A	0.	-0.008	0.	0.011	0.58	-1.	-5.	-0.	5.	6.	1.	0.64	-8.	0.	151.	-1.
24361	HEGT00	COAL-A	0.	-0.034	0.	0.018	0.34	-6.	-20.	-2.	10.	8.	1.	0.41	-10.	3.	90.	-1.
24361	FCSTCL	COAL	0.	-0.108	0.	0.015	0.12	-0.	-0.	-0.	40.	67.	7.	1.00	-8.	10.	69.	-3.
24361	GTAC16	RESIDU	0.	-0.019	0.	0.000	0.01	-7.	-8.	-1.	-1.	2.	-1.	0.06	3.	0.	18.	0.
24361	CC1626	RESIDU	0.	-0.017	0.	0.002	0.12	-6.	-7.	-1.	0.	3.	-0.	0.16	3.	0.	22.	0.
24361	CC1622	RESIDU	0.	-0.017	0.	0.002	0.10	-6.	-7.	-1.	0.	3.	-0.	0.15	3.	0.	19.	0.
24361	CC1222	RESIDU	0.	-0.017	0.	0.002	0.10	-6.	-7.	-1.	0.	3.	-0.	0.15	3.	0.	18.	0.
24361	CC0822	RESIDU	0.	-0.019	0.	0.001	0.03	-6.	-7.	-1.	-0.	3.	-1.	0.09	3.	0.	22.	0.
24361	STIG15	RESIDU	0.	-0.016	0.	0.003	0.16	-6.	-6.	-1.	0.	4.	-0.	0.21	3.	0.	18.	0.
24361	STIG10	RESIDU	0.	-0.017	0.	0.002	0.11	-6.	-7.	-1.	0.	3.	-0.	0.16	3.	0.	17.	0.
24361	STIG15	RESIDU	0.	-0.018	0.	0.001	0.05	-6.	-7.	-1.	-0.	3.	-1.	0.10	3.	0.	18.	0.
24361	DEADV3	RESIDU	0.	-0.017	0.	0.003	0.14	-6.	-7.	-1.	0.	3.	-0.	0.18	1.	0.	40.	0.
24361	DES0A3	DISTIL	-0.017	0.	-0.017	0.019	0.11	-0.	-3.	0.	6.	7.	0.	0.75	2.	0.	34.	0.
24361	DES0A3	RESIDU	-0.017	0.	-0.017	0.019	0.11	-2.	-6.	-0.	4.	4.	1.	0.53	2.	0.	27.	0.
24361	GTRA08	DISTIL	0.	-0.017	0.	0.002	0.10	-4.	-3.	-0.	2.	6.	1.	0.49	3.	0.	29.	0.
24361	GTRA12	DISTIL	0.	-0.017	0.	0.002	0.11	-4.	-5.	-0.	2.	6.	1.	0.49	3.	0.	27.	0.
24361	GTRA16	DISTIL	0.	-0.018	0.	0.002	0.08	-4.	-5.	-0.	2.	6.	1.	0.48	3.	0.	31.	0.
24361	GTR212	DISTIL	0.	-0.019	0.	0.001	0.03	-4.	-5.	-0.	2.	5.	1.	0.45	3.	0.	30.	0.
24361	GTR216	DISTIL	0.	-0.018	0.	0.001	0.05	-4.	-5.	-0.	2.	5.	1.	0.46	3.	0.	30.	0.
24361	GTRW08	DISTIL	0.	-0.017	0.	0.002	0.09	-4.	-5.	-0.	2.	6.	1.	0.48	3.	0.	30.	0.
24361	GTRW12	DISTIL	0.	-0.017	0.	0.002	0.12	-4.	-5.	-0.	2.	6.	1.	0.50	3.	0.	29.	0.
24361	GTRW16	DISTIL	0.	-0.017	0.	0.002	0.10	-4.	-5.	-0.	2.	6.	1.	0.49	3.	0.	31.	0.
24361	GTR312	DISTIL	0.	-0.018	0.	0.001	0.06	-4.	-5.	-0.	2.	5.	1.	0.47	3.	0.	29.	0.
24361	GTR316	DISTIL	0.	-0.018	0.	0.001	0.06	-4.	-5.	-0.	2.	5.	1.	0.46	3.	0.	31.	0.
24361	FCPADS	DISTIL	0.	-0.016	0.	0.003	0.16	-4.	-5.	-0.	2.	6.	1.	0.52	3.	0.	31.	0.
24361	FCMCDS	DISTIL	0.	-0.015	0.	0.004	0.22	-3.	-4.	-0.	3.	6.	1.	0.56	3.	0.	29.	0.
24921	STM141	RESIDU	0.	-0.005	0.	0.008	0.19	-2.	-2.	-0.	2.	5.	0.	0.19	2.	0.	36.	1.
24921	STM141	COAL-F	0.	-0.005	0.	0.008	0.19	-2.	-3.	-0.	2.	4.	1.	0.17	-0.	0.	44.	0.
24921	STM141	COAL-A	0.	-0.005	0.	0.008	0.19	-1.	-3.	-0.	4.	4.	1.	0.21	0.	0.	38.	0.

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PAGE 16

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST

*S*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING\$*****			- - EMISSIONS SAVING\$ - - -			CAPITL--ELECTRIC POWER---		
		ECS	****DIRECT****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX
24921	STM088	RESIDU	0.	-0.003	0.	0.005	0.12	-2.	-1.	-0.
24921	STM088	COAL-F	0.	-0.003	0.	0.005	0.12	-2.	-2.	-0.
24921	STM088	COAL-A	0.	-0.003	0.	0.005	0.12	-0.	-2.	-0.
24921	PFBSTM	COAL-P	0.	-0.010	0.	0.015	0.34	-1.	-6.	-0.
24921	TISTMT	RESIDU	0.	-0.001	0.	0.001	0.03	-1.	0.	-0.
24921	TISTMT	COAL	0.	-0.013	0.	0.021	0.47	-5.	-8.	-1.
24921	TIHRSG	RESIDU	0.	-0.001	0.	0.000	0.01	-1.	0.	-0.
24921	TIHRSG	COAL	0.	-0.012	0.	0.009	0.19	-5.	-7.	-1.
24921	STIRL	DISTIL	0.	-0.001	0.	0.001	0.02	-1.	0.	0.
24921	STIRL	RESIDU	0.	-0.001	0.	0.001	0.02	-1.	0.	-0.
24921	STIRL	COAL	0.	-0.024	0.	0.019	0.42	-9.	-14.	-1.
24921	STIRL	COAL	0.	-0.026	0.	0.020	0.42	-9.	-16.	-1.
24921	HEGT60	COAL-A	0.	-0.037	0.	0.005	0.12	-6.	-22.	-2.
24921	HEGT60	COAL-A	0.	-0.084	0.	0.012	0.13	-15.	-50.	-4.
24921	HEGT60	COAL-A	0.	-0.027	0.	0.007	0.16	-5.	-16.	-1.
24921	FCSTCL	COAL	0.	-0.069	0.	0.012	0.14	0.	1.	-0.
24921	GTSCAR	RESIDU	-0.004	0.002	-0.004	0.005	0.03	-0.	-0.	0.
24921	GTAC08	RESIDU	0.	-0.001	0.	0.001	0.03	-1.	-0.	-0.
24921	GTAC12	RESIDU	0.	-0.002	0.	0.002	0.04	-1.	-0.	-0.
24921	GTAC16	RESIDU	0.	-0.040	0.	0.002	0.05	-22.	-16.	-3.
24921	GTAC16	RESIDU	0.	-0.002	0.	0.002	0.04	-1.	-0.	-0.
24921	GTWC16	RESIDU	0.	-0.041	0.	0.001	0.03	-22.	-16.	-3.
24921	GTWC16	RESIDU	0.	-0.002	0.	0.002	0.04	-1.	-0.	-0.
24921	CC1626	RESIDU	0.	-0.036	0.	0.007	0.15	-17.	-14.	-2.
24921	CC1626	RESIDU	0.	-0.003	0.	0.003	0.06	-1.	-1.	-0.
24921	CC1622	RESIDU	0.	-0.036	0.	0.006	0.14	-18.	-14.	-2.
24921	CC1622	RESIDU	0.	-0.003	0.	0.002	0.05	-1.	-1.	-0.
24921	CC1222	RESIDU	0.	-0.036	0.	0.006	0.14	-18.	-14.	-2.
24921	CC1222	RESIDU	0.	-0.003	0.	0.002	0.05	-1.	-1.	-0.
24921	CC0822	RESIDU	0.	-0.039	0.	0.003	0.08	-21.	-15.	-3.
24921	CC0822	RESIDU	0.	-0.002	0.	0.002	0.05	-1.	-0.	-0.
24921	STIG15	RESIDU	0.	-0.035	0.	0.007	0.17	-13.	-14.	-2.
24921	STIG15	RESIDU	0.	-0.121	0.	0.025	0.17	-65.	-48.	-4.
24921	STIG10	RESIDU	0.	-0.036	0.	0.007	0.15	-15.	-14.	-2.
24921	STIG10	RESIDU	0.	-0.010	0.	0.003	0.08	-4.	-4.	-1.
24921	STIG15	RESIDU	0.	-0.039	0.	0.004	0.09	-18.	-15.	-2.
24921	STIG15	RESIDU	0.	-0.006	0.	0.002	0.05	-2.	-2.	-0.
24921	DEADV3	RESIDU	0.	-0.035	0.	0.008	0.17	-19.	-14.	-2.
24921	DEADV3	RESIDU	0.	-0.007	0.	0.003	0.07	-3.	-2.	-0.
24921	DEHTPM	RESIDU	0.	-0.042	0.	0.001	0.01	-34.	-16.	-3.
24921	DEHTPM	RESIDU	0.	-0.002	0.	0.002	0.04	-1.	-0.	-0.
24921	DESOA3	DISTIL	-0.038	0.002	-0.038	0.045	0.15	-19.	-5.	0.
24921	DESOA3	DISTIL	-0.010	0.002	-0.010	0.014	0.07	-0.	-1.	0.
24921	DESOA3	RESIDU	-0.038	0.002	-0.038	0.045	0.15	-43.	-13.	-0.
24921	DESOA3	RESIDU	-0.010	0.002	-0.010	0.014	0.07	-1.	-	0.
24921	DESOA	DISTIL	-0.003	0.002	-0.003	0.005	0.04	0.	0.	1.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=PGWR

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---							
		ECS	DIRECT	TOTAL	FESR	DIRECT	NOX	SOX	PART	NOX	SOX	PART	EMSR SAVING	TOTAL EXPORT	COST LAEC	SAVED	
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL								MWH			
24921	GTRA08	DISTIL	0.	-0.036	0.	0.006	0.14	-12.	-10.	-1.	2.	14.	2. 0.43	3.	0.	44.	-0.
24921	GTRA08	DISTIL	0.	-0.003	0.	0.002	0.06	-1.	-0.	0.	1.	3.	0. 0.10	2.	0.	53.	0.
24921	GTRA12	DISTIL	0.	-0.036	0.	0.006	0.14	-12.	-10.	-1.	2.	14.	2. 0.43	3.	0.	43.	-0.
24921	GTRA12	DISTIL	0.	-0.003	0.	0.002	0.06	-1.	-0.	0.	1.	3.	0. 0.10	2.	0.	53.	0.
24921	GTRA16	DISTIL	0.	-0.037	0.	0.005	0.12	-12.	-10.	-1.	2.	13.	2. 0.41	3.	0.	45.	-0.
24921	GTRA16	DISTIL	0.	-0.003	0.	0.002	0.05	-1.	-0.	0.	1.	3.	0. 0.09	2.	0.	53.	0.
24921	GTR208	DISTIL	0.	-0.041	0.	0.002	0.04	-14.	-11.	-1.	-1.	12.	2. 0.34	3.	0.	45.	-0.
24921	GTR208	DISTIL	0.	-0.002	0.	0.002	0.04	-1.	-0.	0.	1.	2.	0. 0.08	2.	0.	53.	0.
24921	GTR212	DISTIL	0.	-0.039	0.	0.003	0.07	-13.	-11.	-1.	0.	13.	2. 0.36	3.	0.	45.	-0.
24921	GTR212	DISTIL	0.	-0.002	0.	0.002	0.05	-1.	-0.	0.	1.	2.	0. 0.08	2.	0.	53.	0.
24921	GTR216	DISTIL	0.	-0.039	0.	0.004	0.09	-13.	-10.	-1.	1.	13.	2. 0.38	3.	0.	45.	-0.
24921	GTR216	DISTIL	0.	-0.002	0.	0.002	0.05	-1.	-0.	0.	1.	2.	0. 0.08	2.	0.	53.	0.
24921	GTRW08	DISTIL	0.	-0.037	0.	0.006	0.13	-11.	-10.	-1.	2.	14.	2. 0.43	3.	0.	45.	-0.
24921	GTRW08	DISTIL	0.	-0.004	0.	0.002	0.06	-1.	-1.	-0.	1.	3.	0. 0.11	2.	0.	53.	0.
24921	GTRW12	DISTIL	0.	-0.036	0.	0.007	0.16	-11.	-9.	-1.	3.	14.	2. 0.46	3.	0.	44.	-0.
24921	GTRW12	DISTIL	0.	-0.004	0.	0.003	0.06	-1.	-1.	-0.	1.	3.	0. 0.11	2.	0.	53.	0.
24921	GTRW16	DISTIL	0.	-0.036	0.	0.006	0.14	-11.	-10.	-1.	2.	14.	2. 0.44	2.	0.	45.	-0.
24921	GTRW16	DISTIL	0.	-0.004	0.	0.003	0.06	-1.	-0.	0.	1.	3.	0. 0.10	2.	0.	54.	0.
24921	GTR308	DISTIL	0.	-0.042	0.	0.001	0.01	-14.	-11.	-1.	-0.	12.	2. 0.33	3.	0.	48.	-0.
24921	GTR308	DISTIL	0.	-0.003	0.	0.002	0.04	-1.	-0.	0.	1.	2.	0. 0.08	2.	0.	53.	0.
24921	GTR312	DISTIL	0.	-0.038	0.	0.005	0.10	-12.	-10.	-1.	1.	13.	2. 0.40	3.	0.	44.	-0.
24921	GTR312	DISTIL	0.	-0.003	0.	0.002	0.05	-1.	-0.	0.	1.	3.	0. 0.09	2.	0.	53.	0.
24921	GTR316	DISTIL	0.	-0.038	0.	0.004	0.10	-13.	-10.	-1.	1.	13.	2. 0.39	3.	0.	46.	-0.
24921	GTR316	DISTIL	0.	-0.003	0.	0.002	0.05	-1.	-0.	0.	1.	3.	0. 0.09	2.	0.	53.	0.
24921	FCPADS	DISTIL	0.	-0.034	0.	0.009	0.19	-8.	-7.	-0.	6.	17.	2. 0.60	3.	0.	49.	-1.
24921	FCPADS	DISTIL	0.	-0.008	0.	0.004	0.09	-2.	-2.	-0.	2.	5.	1. 0.17	2.	0.	52.	0.
24921	FCMCDS	DISTIL	0.	-0.031	0.	0.011	0.26	-11.	-6.	-0.	2.	17.	2. 0.53	3.	0.	46.	-0.
24921	FCMCDS	DISTIL	0.	-0.005	0.	0.004	0.09	-1.	-1.	-0.	2.	4.	1. 0.15	2.	0.	51.	0.
24	FCMCDS	DISTIL	-0.149	-2.485	-0.149	1.204	16.04	-836.	-939.	-86.	343.	1050.	95. 0.54	-138.	71.	14661.	-52.
26212	STM141	RESIDU	0.	-0.159	0.	0.263	0.29	-56.	31.	-8.	76.	243.	-8. 0.35	53.	0.	5.	5.
26212	STM141	COAL-F	0.	-0.159	0.	0.263	0.29	-56.	-95.	-8.	80.	136.	17. 0.26	24.	0.	18.	10.
26212	STM141	COAL-A	0.	-0.159	0.	0.263	0.29	81.	-95.	-8.	216.	136.	17. 0.41	43.	0.	8.	12.
26212	STM088	RESIDU	0.	-0.116	0.	0.191	0.21	-40.	49.	-6.	54.	199.	-11. 0.27	50.	0.	13.	3.
26212	STM088	COAL-F	0.	-0.116	0.	0.191	0.21	-40.	-69.	-6.	58.	99.	12. 0.19	18.	0.	25.	7.
26212	STM088	COAL-A	0.	-0.116	0.	0.191	0.21	86.	-69.	-6.	185.	99.	12. 0.33	34.	0.	16.	9.
26212	PFBSTM	COAL-P	0.	-0.174	0.	0.273	0.30	101.	-105.	5.	245.	140.	31. 0.47	25.	0.	21.	9.
26212	PFBSTM	COAL-P	0.	-0.267	0.	0.419	0.36	110.	-160.	13.	331.	215.	53. 0.54	48.	22.	16.	12.
26212	TISTMT	RESIDU	0.	-0.173	0.	0.275	0.30	-61.	26.	-9.	79.	251.	-8. 0.36	-18.	0.	45.	-5.
26212	TISTMT	RESIDU	0.	-0.218	0.	0.346	0.33	-76.	8.	-11.	100.	295.	-5. 0.39	-21.	11.	44.	-6.
26212	TISTMT	COAL	0.	-0.173	0.	0.275	0.30	-61.	-104.	-9.	83.	141.	18. 0.27	-52.	0.	61.	-1.
26212	TISTMT	COAL	0.	-0.354	0.	0.562	0.40	-124.	-213.	-18.	171.	289.	37. 0.37	-72.	44.	51.	-2.
26212	TIHRSG	RESIDU	0.	-0.150	0.	0.125	0.14	-53.	35.	-8.	31.	166.	-16. 0.20	-33.	0.	65.	-10.
26212	TIHRSG	COAL	0.	-0.244	0.	0.202	0.22	-85.	-146.	-12.	58.	98.	14. 0.19	-92.	0.	86.	-7.
26212	STIRL	DISTIL	0.	-0.250	0.	0.198	0.22	-0.	81.	11.	144.	326.	38. 0.57	34.	0.	26.	-6.
26212	STIRL	DISTIL	0.	-0.371	0.	0.295	0.26	-28.	47.	9.	186.	411.	49. 0.59	44.	20.	29.	-8.
26212	STIRL	RESIDU	0.	-0.250	0.	0.198	0.22	-87.	-5.	-20.	51.	218.	-22. 0.28	34.	0.	22.	-0.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

*****FUEL SAVINGS***** - - EMISSIONS SAVINGS - - -																	CAPITL--ELECTRIC POWER---		
PROCS	ECS	ECS ****DIRECT****	*****TOTAL*****			FESR			DIRECT-----			*****TOTAL*****			EMSR	SAVING	TOTAL	COST	LAEC
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED	
																MWH			
26212	STIRL	RESIDU	0.	-0.371	0.	0.295	0.26	-130.	-53.	-33.	78.	285.	-27.	0.31	44.	20.	24.	-1.	
26212	STIRL	COAL	0.	-0.250	0.	0.198	0.22	-87.	-150.	-12.	57.	95.	14.	0.19	-4.	0.	38.	5.	
26212	STIRL	COAL	0.	-0.602	0.	0.479	0.31	-211.	-361.	-30.	137.	230.	34.	0.27	-6.	59.	36.	3.	
26212	HEGT85	COAL-A	0.	-0.384	0.	0.063	0.07	43.	-231.	-19.	187.	14.	7.	0.23	-33.	0.	60.	-3.	
26212	HEGT85	COAL-A	0.	-4.771	0.	0.788	0.13	-786.	-2863.	-239.	1002.	178.	91.	0.23	-108.	479.	46.	-61.	
26212	HEGT60	COAL-A	0.	-0.364	0.	0.084	0.09	41.	-218.	-18.	185.	26.	8.	0.25	-27.	0.	86.	-1.	
26212	HEGT60	COAL-A	0.	-1.484	0.	0.341	0.15	-189.	-890.	-74.	398.	108.	34.	0.25	-2.	129.	40.	-9.	
26212	HEGT00	COAL-A	0.	-0.346	0.	0.101	0.11	31.	-208.	-17.	175.	37.	9.	0.25	-13.	0.	47.	1.	
26212	HEGT00	COAL-A	0.	-0.571	0.	0.167	0.14	-24.	-342.	-29.	214.	61.	15.	0.25	-3.	27.	40.	0.	
26212	FCMCCL	COAL	0.	-0.910	0.	0.405	0.23	165.	284.	20.	588.	1003.	98.	1.00	23.	81.	35.	-1.	
26212	FCSTCL	COAL	0.	-1.187	0.	0.810	0.33	165.	284.	20.	808.	1376.	138.	1.00	54.	145.	30.	3.	
26212	IGGTST	COAL	0.	-1.074	0.	0.314	0.17	-376.	-644.	16.	71.	115.	98.	0.16	34.	88.	32.	2.	
26212	GTSOAR	RESIDU	-0.722	0.474	-0.722	0.922	0.22	59.	13.	18.	203.	258.	44.	0.57	48.	0.	14.	2.	
26212	GTSOAR	RESIDU	-0.951	0.474	-0.951	1.336	0.29	-30.	-73.	16.	247.	398.	67.	0.56	77.	39.	19.	1.	
26212	GTAC08	RESIDU	0.	-0.209	0.	0.238	0.26	-132.	11.	-17.	7.	235.	-18.	0.25	51.	0.	9.	3.	
26212	GTAC08	RESIDU	0.	-0.309	0.	0.352	0.31	-230.	-29.	-28.	-23.	309.	-21.	0.24	67.	20.	12.	4.	
26212	GTAC12	RESIDU	0.	-0.213	0.	0.235	0.25	-118.	10.	-15.	21.	234.	-16.	0.27	49.	0.	10.	3.	
26212	GTAC12	RESIDU	0.	-0.394	0.	0.434	0.33	-281.	-63.	-35.	-21.	354.	-21.	0.26	76.	36.	15.	4.	
26212	GTAC16	RESIDU	0.	-0.218	0.	0.230	0.25	-113.	8.	-15.	26.	232.	-16.	0.27	48.	0.	11.	3.	
26212	GTAC16	RESIDU	0.	-0.458	0.	0.483	0.34	-319.	-88.	-40.	-23.	398.	-21.	0.26	81.	46.	17.	3.	
26212	GTWC16	RESIDU	0.	-0.238	0.	0.209	0.23	-123.	-0.	-16.	18.	223.	-18.	0.25	49.	0.	12.	2.	
26212	GTWC16	RESIDU	0.	-0.522	0.	0.459	0.32	-358.	-114.	-45.	-50.	393.	-26.	0.23	87.	50.	18.	2.	
26212	CC1626	RESIDU	0.	-0.241	0.	0.207	0.22	-105.	-1.	-14.	34.	222.	-16.	0.27	45.	0.	15.	1.	
26212	CC1626	RESIDU	0.	-0.832	0.	0.715	0.35	-544.	-238.	-68.	-56.	569.	-29.	0.25	125.	103.	21.	1.	
26212	CC1622	RESIDU	0.	-0.231	0.	0.217	0.24	-102.	3.	-14.	36.	226.	-16.	0.28	45.	0.	14.	2.	
26212	CC1622	RESIDU	0.	-0.717	0.	0.675	0.36	-475.	-192.	-60.	-36.	534.	-25.	0.27	110.	89.	20.	2.	
26212	CC1222	RESIDU	0.	-0.229	0.	0.219	0.24	-101.	3.	-14.	37.	227.	-15.	0.28	46.	0.	14.	2.	
26212	CC1222	RESIDU	0.	-0.707	0.	0.678	0.36	-469.	-188.	-59.	-32.	534.	-24.	0.27	112.	88.	20.	2.	
26212	CC0822	RESIDU	0.	-0.213	0.	0.235	0.25	-102.	10.	-14.	37.	234.	-15.	0.29	49.	0.	10.	3.	
26212	CC0822	RESIDU	0.	-0.524	0.	0.578	0.37	-359.	-115.	-45.	-12.	458.	-20.	0.28	95.	51.	17.	4.	
26212	STIG15	RESIDU	0.	-0.370	0.	0.077	0.08	-150.	-53.	-17.	-12.	166.	-24.	0.15	44.	0.	26.	-4.	
26212	STIG15	RESIDU	0.	-30.541	0.	6.387	0.17	-18369.	-12122.	-913.	-6721.	7144.	33.	0.01	2334.	3421.	36.	-473.	
26212	STIG10	RESIDU	0.	-0.337	0.	0.111	0.12	-144.	-40.	-15.	-6.	181.	-21.	0.17	46.	0.	22.	-2.	
26212	STIG10	RESIDU	0.	-2.569	0.	0.846	0.22	-1586.	-933.	-74.	-510.	844.	7.	0.09	237.	278.	32.	-31.	
26212	STIG1S	RESIDU	0.	-0.321	0.	0.126	0.14	-145.	-34.	-13.	-7.	187.	-19.	0.18	46.	0.	21.	-2.	
26212	STIG1S	RESIDU	0.	-1.438	0.	0.565	0.23	-907.	-480.	-40.	-277.	558.	3.	0.12	151.	146.	29.	-14.	
26212	DEADV3	RESIDU	0.	-0.293	0.	0.155	0.17	-156.	-22.	-17.	-18.	200.	-21.	0.18	27.	0.	29.	-3.	
26212	DEADV3	RESIDU	0.	-1.493	0.	0.788	0.29	-1525.	-502.	-119.	-806.	686.	-63.	-0.07	76.	172.	37.	-22.	
26212	DEHTPM	RESIDU	0.	-0.217	0.	0.230	0.25	-161.	8.	-15.	-22.	232.	-16.	0.22	29.	0.	22.	0.	
26212	DEHTPM	RESIDU	0.	-0.467	0.	0.495	0.34	-550.	-92.	-40.	-248.	406.	-21.	0.10	41.	48.	28.	-2.	
26212	DES0A3	DISTIL	-0.791	0.474	-0.791	0.922	0.14	-42.	156.	24.	96.	377.	19.	0.55	19.	0.	41.	-11.	
26212	DES0A3	DISTIL	-2.358	0.474	-2.358	3.135	0.25	-3759.	-99.	24.	-2920.	1286.	87.	-0.53	37.	207.	49.	-57.	
26212	DES0A3	RESIDU	-0.791	0.474	-0.791	0.922	0.14	-317.	-13.	17.	-173.	232.	44.	0.12	19.	0.	35.	-5.	
26212	DES0A3	RESIDU	-2.358	0.474	-2.358	3.135	0.25	-8216.	-603.	5.	-7360.	852.	162.	-2.16	37.	207.	43.	-38.	
26212	GTSOAD	DISTIL	-0.699	0.474	-0.699	0.922	0.24	115.	17.	24.	253.	395.	22.	0.75	51.	0.	12.	-3.	
26212	GTSOA	DISTIL	-0.875	0.474	-0.875	1.273	0.31	43.	14	24.	293.	553.	36.	0.73	78.	33.	19.	-4.	

MONTELL PARK PLANTING SYSTEM - PINE-3

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ISE PEG AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 19

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---			
		ECS	DIRECT	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED
		FUEL OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH
26212	GTRA08	DISTIL	0.	-0.243	0.	0.205	0.22	-17.	83.	12.	127.	328.	38. 0.55
26212	GTRA08	DISTIL	0.	-0.725	0.	0.613	0.34	-263.	-53.	3.	167.	679.	83. 0.54
26212	GTRA12	DISTIL	0.	-0.237	0.	0.211	0.23	-15.	84.	12.	129.	329.	38. 0.56
26212	GTRA12	DISTIL	0.	-0.690	0.	0.613	0.34	-249.	-43.	4.	170.	669.	81. 0.55
26212	GTRA16	DISTIL	0.	-0.236	0.	0.212	0.23	-17.	85.	12.	127.	330.	38. 0.56
26212	GTRA16	DISTIL	0.	-0.638	0.	0.575	0.34	-229.	-29.	5.	162.	635.	77. 0.55
26212	GTR208	DISTIL	0.	-0.236	0.	0.212	0.23	-23.	85.	12.	121.	330.	38. 0.55
26212	GTR208	DISTIL	0.	-0.528	0.	0.474	0.32	-185.	2.	7.	138.	551.	66. 0.54
26212	GTR212	DISTIL	0.	-0.237	0.	0.211	0.23	-21.	84.	12.	123.	329.	38. 0.55
26212	GTR212	DISTIL	0.	-0.569	0.	0.507	0.33	-201.	-9.	6.	145.	579.	70. 0.54
26212	GTR216	DISTIL	0.	-0.233	0.	0.215	0.23	-18.	86.	12.	126.	331.	38. 0.56
26212	GTR216	DISTIL	0.	-0.573	0.	0.530	0.34	-202.	-10.	6.	152.	593.	71. 0.55
26212	GTRW08	DISTIL	0.	-0.275	0.	0.173	0.19	-25.	74.	11.	119.	319.	37. 0.53
26212	GTRW08	DISTIL	0.	-0.979	0.	0.615	0.30	-365.	-125.	-1.	148.	747.	93. 0.51
26212	GTRW12	DISTIL	0.	-0.262	0.	0.185	0.20	-20.	77.	11.	124.	322.	38. 0.54
26212	GTRW12	DISTIL	0.	-0.948	0.	0.670	0.32	-352.	-116.	-0.	168.	769.	95. 0.52
26212	GTRW16	DISTIL	0.	-0.259	0.	0.188	0.20	-21.	78.	11.	123.	323.	38. 0.54
26212	GTRW16	DISTIL	0.	-0.867	0.	0.629	0.32	-320.	-93.	1.	161.	725.	90. 0.52
26212	GTR308	DISTIL	0.	-0.288	0.	0.160	0.17	-37.	70.	11.	107.	315.	37. 0.52
26212	GTR308	DISTIL	0.	-0.783	0.	0.435	0.26	-286.	-59.	2.	105.	597.	74. 0.48
26212	GTR312	DISTIL	0.	-0.256	0.	0.192	0.21	-23.	79.	11.	121.	324.	38. 0.54
26212	GTR312	DISTIL	0.	-0.742	0.	0.558	0.31	-270.	-58.	3.	148.	653.	80. 0.52
26212	GTR316	DISTIL	0.	-0.257	0.	0.191	0.21	-24.	79.	11.	120.	324.	38. 0.54
26212	GTR316	DISTIL	0.	-0.734	0.	0.546	0.31	-267.	-55.	3.	145.	644.	79. 0.52
26212	FCPADS	DISTIL	0.	-0.302	0.	0.146	0.16	-10.	89.	12.	134.	334.	38. 0.57
26212	FCPADS	DISTIL	0.	-1.897	0.	0.919	0.28	-307.	201.	19.	599.	1741.	185. 0.82
26212	FCMCDS	DISTIL	0.	-0.252	0.	0.195	0.21	-28.	94.	11.	116.	339.	38. 0.55
26212	FCMCDS	DISTIL	0.	-1.256	0.	0.972	0.36	-985.	199.	-3.	-268.	1417.	129. 0.50
26214	STM141	RESIDU	0.	-0.098	0.	0.162	0.25	-34.	38.	-5.	46.	166.	-9. 0.32
26214	STM141	RESIDU	0.	-0.132	0.	0.218	0.30	-46.	24.	-7.	62.	200.	-7. 0.36
26214	STM141	COAL-F	0.	-0.098	0.	0.162	0.25	-34.	-59.	-5.	49.	83.	10. 0.23
26214	STM141	COAL-F	0.	-0.132	0.	0.218	0.30	-46.	-79.	-7.	66.	112.	14. 0.27
26214	STM141	COAL-A	0.	-0.098	0.	0.162	0.25	70.	-59.	-5.	153.	83.	10. 0.39
26214	STM141	COAL-A	0.	-0.132	0.	0.218	0.30	65.	-79.	-7.	178.	112.	14. 0.43
26214	STM088	RESIDU	0.	-0.097	0.	0.161	0.25	-34.	38.	-5.	45.	165.	-9. 0.32
26214	STM088	COAL-F	0.	-0.097	0.	0.161	0.25	-34.	-58.	-5.	49.	83.	10. 0.23
26214	STM088	COAL-A	0.	-0.097	0.	0.161	0.25	70.	-58.	-5.	153.	83.	10. 0.39
26214	PFBSTM	COAL-P	0.	-0.101	0.	0.159	0.25	79.	-60.	1.	163.	82.	16. 0.42
26214	PFBSTM	COAL-P	0.	-0.216	0.	0.341	0.36	90.	-130.	10.	269.	175.	43. 0.54
26214	TISTMT	RESIDU	0.	-0.100	0.	0.159	0.25	-35.	37.	-5.	45.	164.	-9. 0.32
26214	TISTMT	RESIDU	0.	-0.183	0.	0.290	0.34	-64.	4.	-9.	84.	246.	-4. 0.40
26214	TISTMT	COAL	0.	-0.100	0.	0.159	0.25	-35.	-60.	-5.	48.	82.	10. 0.22
26214	TISTMT	COAL	0.	-0.286	0.	0.454	0.40	-100.	-171.	-14.	138.	233.	30. 0.37
26214	TIHRSG	RESIDU	0.	-0.205	0.	0.054	0.08	-72.	-5.	-10.	7.	119.	-19. 0.17
26214	TIHRSG	RESIDU	0.	-0.122	0.	0.101	0.16	-43.	28.	-6.	25.	135.	-13. 0.24
26214	TIHRSG	COAL	0.	-0.142	0.	0.118	0.18	-50.	-85.	-7.	34.	57.	8. 0.16

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING \$*****				- - - EMISSIONS SAVING \$ - - -				CAPITL--ELECTRIC POWER---								
		ECS *****DIRECT*****	TOTAL	FESR	DIRECT	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	SAVED						
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		EXPORT	MWH					
26214	TIHRSO	COAL	0.	-0.191	0.	0.158	0.22	-57.	-114.	-10.	46.	76.	11.	0.19	-78.	8.	90.	-7
26214	STIRL	DISTIL	0.	-0.145	0.	0.115	0.18	13.	82.	10.	97.	224.	26.	0.55	26.	0.	20.	-5
26214	STIRL	DISTIL	0.	-0.301	0.	0.239	0.26	-23.	38.	8.	151.	334.	40.	0.59	38.	26.	28.	-8
26214	STIRL	RESIDU	0.	-0.145	0.	0.115	0.18	-51.	19.	-10.	29.	145.	-16.	0.25	25.	0.	16.	-1
26214	STIRL	RESIDU	0.	-0.301	0.	0.239	0.26	-105.	-43.	-27.	63.	232.	-23.	0.31	38.	26.	23.	-2
26214	STIRL	COAL	0.	-0.145	0.	0.115	0.18	-51.	-87.	-7.	33.	55.	8.	0.15	-0.	0.	36.	3
26214	STIRL	COAL	0.	-0.471	0.	0.374	0.30	-165.	-283.	-24.	107.	180.	27.	0.27	-1.	55.	35.	2
26214	HEGT85	COAL-A	0.	-0.223	0.	0.037	0.06	51.	-134.	-11.	134.	8.	4.	0.23	-18.	0.	60.	-1
26214	HEGT85	COAL-A	0.	-3.731	0.	0.616	0.13	-612.	-2239.	-187.	786.	139.	71.	0.23	-58.	383.	44.	-45
26214	HEGT60	COAL-A	0.	-0.211	0.	0.049	0.08	50.	-127.	-11.	133.	15.	5.	0.24	-15.	0.	56.	-1
26214	HEGT60	COAL-A	0.	-1.160	0.	0.267	0.15	-146.	-696.	-58.	313.	84.	26.	0.25	-11.	109.	42.	-10
26214	HEGT00	COAL-A	0.	-0.201	0.	0.059	0.09	44.	-121.	-10.	127.	22.	5.	0.25	-12.	0.	52.	-0
26214	HEGT00	COAL-A	0.	-0.446	0.	0.131	0.14	-16.	-268.	-22.	170.	48.	12.	0.25	-6.	30.	42.	-2
26214	FCMCCL	COAL	0.	-0.697	0.	0.331	0.23	134.	231.	17.	465.	793.	77.	1.00	14.	72.	36.	-2
26214	FCSTCL	COAL	0.	-0.926	0.	0.666	0.34	134.	231.	16.	647.	1102.	110.	1.00	38.	125.	31.	1
26214	IGGTST	COAL	0.	-0.837	0.	0.275	0.18	-293.	-502.	13.	65.	106.	79.	0.18	25.	80.	32.	0
26214	GTSOAR	RESIDU	-0.529	0.385	-0.529	0.645	0.18	67.	32.	15.	151.	174.	30.	0.57	32.	0.	8.	0
26214	GTSOAR	RESIDU	-0.773	0.385	-0.773	1.086	0.29	-28.	-60.	13.	197.	323.	55.	0.56	63.	41.	18.	-0
26214	GTAC08	RESIDU	0.	-0.121	0.	0.138	0.21	-65.	28.	-8.	15.	155.	-13.	0.25	34.	0.	4.	1
26214	GTAC08	RESIDU	0.	-0.251	0.	0.286	0.31	-193.	-23.	-24.	-25.	251.	-17.	0.24	58.	26.	11.	2
26214	GTAC12	RESIDU	0.	-0.124	0.	0.136	0.21	-57.	28.	-8.	23.	154.	-13.	0.26	34.	0.	5.	1
26214	GTAC12	RESIDU	0.	-0.320	0.	0.352	0.33	-234.	-51.	-29.	-23.	296.	-17.	0.25	65.	39.	14.	2
26214	GTAC16	RESIDU	0.	-0.126	0.	0.133	0.21	-54.	27.	-7.	26.	153.	-12.	0.27	33.	0.	6.	1
26214	GTAC16	RESIDU	0.	-0.372	0.	0.393	0.34	-265.	-72.	-33.	-25.	324.	-18.	0.26	69.	47.	16.	1
26214	GTWC16	RESIDU	0.	-0.138	0.	0.121	0.19	-60.	22.	-8.	20.	148.	-14.	0.25	33.	0.	7.	0
26214	GTWC16	RESIDU	0.	-0.424	0.	0.373	0.32	-297.	-93.	-37.	-46.	319.	-22.	0.22	74.	50.	17.	0
26214	CC1626	RESIDU	0.	-0.139	0.	0.120	0.19	-49.	21.	-7.	31.	148.	-13.	0.26	33.	0.	8.	0
26214	CC1626	RESIDU	0.	-0.687	0.	0.593	0.36	-454.	-198.	-57.	-50.	470.	-24.	0.25	103.	96.	21.	-1
26214	CC1622	RESIDU	0.	-0.133	0.	0.126	0.20	-47.	24.	-7.	32.	150.	-12.	0.27	33.	0.	7.	0
26214	CC1622	RESIDU	0.	-0.592	0.	0.560	0.36	-397.	-160.	-50.	-34.	441.	-21.	0.27	91.	84.	20.	-0
26214	CC1222	RESIDU	0.	-0.132	0.	0.127	0.20	-47.	24.	-7.	33.	151.	-12.	0.27	33.	0.	6.	0
26214	CC1222	RESIDU	0.	-0.584	0.	0.563	0.37	-392.	-157.	-49.	-31.	441.	-20.	0.27	93.	83.	19.	0
26214	CC0822	RESIDU	0.	-0.123	0.	0.136	0.21	-47.	28.	-7.	33.	155.	-12.	0.28	34.	0.	5.	1
26214	CC0822	RESIDU	0.	-0.434	0.	0.480	0.37	-302.	-96.	-38.	-14.	379.	-16.	0.28	82.	61.	16.	2
26214	STIG15	RESIDU	0.	-0.215	0.	0.045	0.07	-75.	-9.	-11.	4.	115.	-19.	0.16	29.	0.	22.	-3
26214	STIG15	RESIDU	0.	-24.815	0.	5.189	0.17	-14931.	-9849.	-741.	-5467.	5804.	27.	0.01	1894.	2790.	36.	-386
26214	STIG10	RESIDU	0.	-0.195	0.	0.064	0.10	-72.	-1.	-9.	7.	124.	-17.	0.18	34.	0.	15.	-2
26214	STIG10	RESIDU	0.	-2.087	0.	0.688	0.22	-1294.	-758.	-59.	-420.	685.	6.	0.09	191.	236.	32.	-27
26214	STIG1S	RESIDU	0.	-0.186	0.	0.073	0.11	-73.	2.	-9.	6.	127.	-16.	0.19	34.	0.	14.	-2
26214	STIG1S	RESIDU	0.	-1.169	0.	0.459	0.23	-743.	-390.	-32.	-231.	453.	3.	0.12	127.	128.	28.	-13
26214	DEADV3	RESIDU	0.	-0.170	0.	0.090	0.14	-63.	9.	-9.	16.	134.	-16.	0.22	23.	0.	21.	-2
26214	DEADV3	RESIDU	0.	-1.213	0.	0.640	0.29	-1253.	-408.	-97.	-669.	557.	-51.	-0.08	64.	149.	36.	-19
26214	DEHTPM	RESIDU	0.	-0.126	0.	0.134	0.21	-66.	27.	-7.	14.	153.	-12.	0.25	22.	0.	17.	-1
26214	DEHTPM	RESIDU	0.	-0.379	0.	0.402	0.34	-461.	-75.	-33.	-215.	330.	-18.	0.09	36.	49.	27.	-3
26214	DES0A3	DISTIL	-0.569	0.385	-0.569	0.645	0.12	97.	139	19.	176.	264.	12.	0.72	19.	0.	33.	-8
26214	DES0A3	STIL	-1.916	0.385	-1.916	2.547	0.25	-3098.	-80.	19.	-2417.	1045.	71.	-0.54	32.	178.	49.	-48

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)

EMISSION UNITS = TIME 1990 LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

		*****FUEL SAVINGS***** - - EMISSIONS SAVINGS - - -										CAPITL--ELECTRIC POWER---					
PROCS	ECS	ECS	*****DIRECT*****	-----TOTAL-----	-----FESR-----	-----DIRECT-----	-----TOTAL-----	*****	*****	EMSR	SAVING	TOTAL	COST				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	LAEC			
													MWH	SAVED			
26214	DES0A3	RESIDU	-0.569	0.385	-0.569	0.645	0.12	22.	17.	15.	105.	159.	30. 0.47	19.	0.	27.	-3.
26214	DES0A3	RESIDU	-1.916	0.385	-1.916	2.547	0.25	-6768.	-490.	4.	-6073.	692.	132. -2.20	32.	178.	43.	-32.
26214	GTSCAD	DISTIL	-0.516	0.385	-0.516	0.645	0.20	110.	147.	19.	190.	274.	14. 0.76	35.	0.	8.	-3.
26214	GTSCAD	DISTIL	-0.711	0.385	-0.711	1.034	0.31	31.	116.	19.	234.	449.	29. 0.72	67.	37.	17.	-4.
26214	GTRA08	DISTIL	0.	-0.141	0.	0.119	0.18	11.	83.	10.	95.	225.	26. 0.55	32.	0.	13.	-4.
26214	GTRA08	DISTIL	0.	-0.589	0.	0.498	0.34	-218.	-43.	3.	132.	551.	67. 0.54	86.	78.	25.	-9.
26214	GTRA12	DISTIL	0.	-0.138	0.	0.122	0.19	12.	84.	10.	96.	226.	26. 0.55	31.	0.	13.	-4.
26214	GTRA12	DISTIL	0.	-0.561	0.	0.498	0.34	-207.	-35.	3.	134.	544.	66. 0.54	83.	75.	25.	-8.
26214	GTRA16	DISTIL	0.	-0.137	0.	0.123	0.19	11.	84.	10.	95.	226.	26. 0.55	31.	0.	13.	-4.
26214	GTRA16	DISTIL	0.	-0.519	0.	0.467	0.34	-190.	-23.	4.	127.	516.	62. 0.54	76.	68.	25.	-8.
26214	GTR208	DISTIL	0.	-0.137	0.	0.123	0.19	8.	84.	10.	91.	226.	26. 0.55	33.	0.	12.	-4.
26214	GTR208	DISTIL	0.	-0.429	0.	0.385	0.32	-154.	2.	5.	108.	447.	54. 0.53	71.	52.	23.	-7.
26214	GTR212	DISTIL	0.	-0.137	0.	0.122	0.19	9.	84.	10.	92.	226.	26. 0.55	32.	0.	12.	-4.
26214	GTR212	DISTIL	0.	-0.462	0.	0.412	0.33	-167.	-7.	5.	114.	471.	57. 0.54	73.	58.	23.	-7.
26214	GTR216	DISTIL	0.	-0.135	0.	0.125	0.19	10.	85.	10.	94.	227.	26. 0.55	31.	0.	12.	-4.
26214	GTR216	DISTIL	0.	-0.465	0.	0.431	0.34	-168.	-8.	5.	120.	482.	58. 0.54	73.	60.	24.	-7.
26214	GTRW08	DISTIL	0.	-0.160	0.	0.100	0.16	6.	78.	10.	90.	220.	25. 0.53	32.	0.	16.	-5.
26214	GTRW08	DISTIL	0.	-0.796	0.	0.500	0.30	-301.	-101.	-1.	116.	607.	76. 0.50	103.	97.	28.	-14.
26214	GTRW12	DISTIL	0.	-0.152	0.	0.108	0.17	9.	80.	10.	93.	222.	26. 0.54	32.	0.	15.	-5.
26214	GTRW12	DISTIL	0.	-0.770	0.	0.544	0.32	-290.	-94.	-0.	133.	625.	77. 0.52	104.	99.	27.	-12.
26214	GTRW16	DISTIL	0.	-0.150	0.	0.109	0.17	9.	80.	10.	93.	222.	26. 0.54	31.	0.	15.	-5.
26214	GTRW16	DISTIL	0.	-0.704	0.	0.511	0.32	-264.	-76.	1.	127.	589.	73. 0.52	96.	90.	27.	-12.
26214	GTR308	DISTIL	0.	-0.167	0.	0.093	0.14	-1.	76.	10.	83.	218.	25. 0.52	33.	0.	17.	-5.
26214	GTR308	DISTIL	0.	-0.636	0.	0.353	0.26	-237.	-56.	2.	82.	485.	60. 0.48	85.	68.	28.	-12.
26214	GTR312	DISTIL	0.	-0.148	0.	0.111	0.17	8.	81.	10.	91.	223.	26. 0.54	33.	0.	13.	-5.
26214	GTR312	DISTIL	0.	-0.603	0.	0.453	0.31	-224.	-47.	2.	116.	531.	65. 0.52	88.	75.	25.	-10.
26214	GTR316	DISTIL	0.	-0.149	0.	0.111	0.17	7.	81.	10.	91.	223.	26. 0.54	32.	0.	14.	-5.
26214	GTR316	DISTIL	0.	-0.596	0.	0.444	0.31	-221.	-45.	3.	114.	524.	64. 0.52	86.	73.	26.	-10.
26214	FCPADS	DISTIL	0.	-0.175	0.	0.085	0.13	6.	74.	10.	90.	216.	25. 0.53	25.	0.	35.	-9.
26214	FCPADS	DISTIL	0.	-1.542	0.	0.747	0.28	-248.	170.	16.	488.	1422.	151. 0.82	91.	190.	52.	-62.
26214	FCMCDS	DISTIL	0.	-0.146	0.	0.113	0.18	13.	82.	10.	96.	224.	26. 0.55	24.	0.	31.	-3.
26214	FCMCDS	DISTIL	0.	-1.021	0.	0.790	0.36	-813.	168.	-2.	-230.	1158.	105. 0.50	69.	145.	47.	-40.
26216	STM141	RESIDU	0.	-0.061	0.	0.101	0.21	-21.	36.	-3.	28.	114.	-8. 0.29	22.	0.	5.	0.
26216	STM141	COAL-F	0.	-0.061	0.	0.101	0.21	-21.	-37.	-3.	31.	52.	7. 0.19	8.	0.	21.	4.
26216	STM141	COAL-A	0.	-0.061	0.	0.101	0.21	57.	-37.	-3.	109.	52.	7. 0.36	16.	0.	11.	5.
26216	STM088	RESIDU	0.	-0.044	0.	0.073	0.15	-15.	43.	-2.	20.	97.	-9. 0.23	18.	0.	16.	-1.
26216	STM088	COAL-F	0.	-0.044	0.	0.073	0.15	-15.	-26.	-2.	22.	38.	5. 0.14	6.	0.	27.	3.
26216	STM088	COAL-A	0.	-0.044	0.	0.073	0.15	59.	-26.	-2.	97.	38.	5. 0.30	13.	0.	18.	3.
26216	PFBSTM	COAL-P	0.	-0.070	0.	0.109	0.23	72.	-42.	6.	130.	56.	17. 0.43	3.	0.	32.	2.
26216	PFBSTM	COAL-P	0.	-0.104	0.	0.162	0.29	76.	-62.	9.	161.	83.	25. 0.49	12.	8.	23.	4.
26216	TISTMT	RESIDU	0.	-0.069	0.	0.110	0.23	-24.	33.	-3.	31.	120.	-8. 0.30	-15.	0.	56.	-5.
26216	TISTMT	RESIDU	0.	-0.138	0.	0.218	0.33	-48.	6.	-7.	63.	187.	-3. 0.39	-27.	17.	54.	-7.
26216	TISTMT	COAL	0.	-0.069	0.	0.110	0.23	-24.	-42.	-3.	33.	56.	7. 0.21	-35.	0.	83.	-2.
26216	TISTMT	COAL	0.	-0.138	0.	0.218	0.33	-48.	-83.	-7.	66.	112.	14. 0.30	-48.	17.	85.	-3.
26216	TIHRSG	RESIDU	0.	-0.096	0.	0.080	0.17	-34.	22.	-5.	20.	106.	-10. 0.25	-33.	0.	86.	-8.
26216	TIHRSG	COAL	0.	-0.096	0.	0.080	0.17	-34.	-58.	-5.	23.	38.	6. 0.14	-53.	0.	108.	-5.

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DATE 06/12/79

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GENERAL ELECTRIC COMPANY

PAGE 22

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS		ECS		*****FUEL SAVINGS*****				-----EMISSIONS SAVINGS-----				CAPITL--ELECTRIC POWER---		TOTAL COST LAEC	
				*****DIRECT*****				*****TOTAL*****				EMSR SAVING		EXPORT	
				FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	MMH
26216	STIRL	DISTIL	O.	-0.100	O.	0.079	0.16	13.	69.	8.	71.	166.	19.	0.55	15.
26216	STIRL	DISTIL	O.	-0.237	O.	0.188	0.26	-18.	30.	6.	119.	263.	31.	0.59	24.
26216	STIRL	RESIDU	O.	-0.100	O.	0.079	0.16	-35.	21.	-11.	20.	107.	-17.	0.23	15.
26216	STIRL	RESIDU	O.	-0.237	O.	0.188	0.26	-83.	-34.	-26.	50.	182.	-23.	0.30	24.
26216	STIRL	COAL	O.	-0.100	O.	0.079	0.16	-35.	-60.	-5.	23.	38.	6.	0.14	-4.
26216	STIRL	COAL	O.	-0.237	O.	0.188	0.26	-83.	-142.	-12.	54.	90.	13.	0.23	-2.
26216	HEGT85	COAL-A	O.	-0.154	O.	0.025	0.05	36.	-92.	-8.	94.	6.	3.	0.22	-22.
26216	HEGT85	COAL-A	O.	-1.878	O.	0.310	0.12	-290.	-1127.	-94.	414.	70.	36.	0.22	-29.
26216	HEGT60	COAL-A	O.	-0.146	O.	0.033	0.07	35.	-87.	-7.	93.	11.	3.	0.23	-20.
26216	HEGT60	COAL-A	O.	-0.584	O.	0.134	0.13	-55.	-350.	-29.	178.	42.	13.	0.24	-25.
26216	HEGT00	COAL-A	O.	-0.139	O.	0.041	0.08	31.	-83.	-7.	89.	15.	4.	0.23	-16.
26216	HEGT00	COAL-A	O.	-0.225	O.	0.066	0.11	10.	-135.	-11.	104.	24.	6.	0.23	-14.
26216	FCMCCL	COAL	O.	-0.084	O.	0.096	0.20	37.	63.	5.	94.	161.	15.	0.58	-14.
26216	FCMCCL	COAL	C.	-0.241	O.	0.276	0.34	106.	182.	14.	272.	465.	44.	1.00	-5.
26216	FCSTCL	COAL	O.	-0.080	O.	0.099	0.21	24.	42.	3.	82.	140.	14.	0.50	-12.
26216	FCSTCL	COAL	O.	-0.348	O.	0.432	0.40	106.	182.	14.	357.	608.	60.	1.00	3.
26216	IGGTST	COAL	O.	-0.101	O.	0.079	0.16	-35.	-60.	4.	22.	38.	15.	0.16	-11.
26216	IGGTST	COAL	O.	-0.304	O.	0.237	0.28	-106.	-182.	12.	68.	114.	44.	0.28	2.
26216	GTSOAR	RESIDU	-0.402	0.303	-0.402	0.483	0.17	34.	31.	12.	92.	128.	23.	0.52	19.
26216	GTSOAR	RESIDU	-0.608	0.303	-0.608	0.855	0.29	-46.	-47.	10.	131.	254.	43.	0.53	44.
26216	GTAC08	RESIDU	O.	-0.084	O.	0.095	0.20	-82.	27.	-10.	-28.	114.	-15.	0.15	20.
26216	GTAC08	RESIDU	O.	-0.198	O.	0.225	0.31	-195.	-18.	-23.	-62.	198.	-18.	0.17	38.
26216	GTAC12	RESIDU	O.	-0.085	O.	0.094	0.19	-77.	27.	-9.	-22.	113.	-14.	0.16	20.
26216	GTAC12	RESIDU	O.	-0.252	O.	0.277	0.33	-227.	-40.	-27.	-61.	233.	-18.	0.19	44.
26216	GTAC16	RESIDU	O.	-0.087	O.	0.092	0.19	-75.	26.	-9.	-20.	112.	-14.	0.17	19.
26216	GTAC16	RESIDU	O.	-0.293	O.	0.309	0.34	-252.	-56.	-30.	-62.	255.	-19.	0.20	47.
26216	GTWC16	RESIDU	O.	-0.095	O.	0.084	0.17	-79.	23.	-10.	-24.	109.	-15.	0.15	19.
26216	GTWC16	RESIDU	O.	-0.334	O.	0.293	0.32	-276.	-73.	-34.	-79.	251.	-22.	0.17	50.
26216	CC1626	RESIDU	O.	-0.096	O.	0.083	0.17	-72.	22.	-9.	-17.	108.	-14.	0.16	19.
26216	CC1626	RESIDU	O.	-0.529	O.	0.454	0.35	-393.	-151.	-48.	-83.	361.	-24.	0.21	73.
26216	CC1622	RESIDU	O.	-0.092	O.	0.087	0.18	-71.	24.	-9.	-16.	110.	-14.	0.17	19.
26216	CC1622	RESIDU	O.	-0.456	O.	0.428	0.36	-349.	-122.	-43.	-71.	339.	-21.	0.22	64.
26216	CC1222	RESIDU	O.	-0.092	O.	0.088	0.18	-70.	24.	-9.	-16.	110.	-14.	0.17	20.
26216	CC1222	RESIDU	O.	-0.449	O.	0.430	0.36	-345.	-119.	-42.	-68.	339.	-20.	0.22	66.
26216	CC0822	RESIDU	O.	-0.085	O.	0.094	0.19	-71.	27.	-9.	-16.	113.	-14.	0.18	20.
26216	CC0822	RESIDU	O.	-0.333	O.	0.366	0.37	-275.	-72.	-33.	-55.	291.	-18.	0.23	55.
26216	STIG15	RESIDU	O.	-0.148	O.	0.031	0.06	-89.	1.	-4.	-35.	86.	-12.	0.08	15.
26216	STIG15	RESIDU	O.	-19.534	O.	4.085	0.17	-11796.	-7753.	-580.	-4346.	4569.	25.	0.01	1479.
26216	STIG10	RESIDU	O.	-0.135	O.	0.044	0.09	-87.	7.	-4.	-33.	92.	-10.	0.10	18.
26216	STIG10	RESIDU	O.	-1.643	O.	0.541	0.22	-1062.	-596.	-43.	-373.	540.	8.	0.07	143.
26216	STIG15	RESIDU	O.	-0.129	O.	0.051	0.10	-88.	9.	-3.	-33.	94.	-10.	0.11	19.
26216	STIG15	RESIDU	O.	-0.920	O.	0.361	0.23	-628.	-307.	-22.	-225.	357.	5.	0.09	91.
26216	DEADV3	RESIDU	O.	-0.117	O.	0.062	0.13	-134.	14.	-10.	-79.	99.	-16.	0.01	13.
26216	DEADV3	RESIDU	O.	-0.955	O.	0.504	0.29	-1089.	-321.	-81.	-629.	439.	-45.	-0.14	44.
26216	DEHTPM	RESIDU	O.	-0.087	O.	0.092	0.19	-136.		-9.	-81.	112.	-14.	0.04	13.
26216	DEHTPM	RESIDU	O.	-0.298	O.	0.317	0.34	-466.		-31.	-272.	260.	-19.	-0.04	22.

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DATE 06/12/79

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GENERAL ELECTRIC COMPANY

PAGE 23

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

		*****FUEL SAVINGS*****				-----EMISSIONS-----				SAVINGS-----				CAPITL--ELECTRIC POWER---				
PROCS	ECS	ECS *****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED	EXPORT	MWH				
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART								
26216	DESOA3	DISTIL	-0.430	0.303	-0.430	0.483	0.11	-202.	112.	15.	-148.	197.	9.	0.12	9.	0.	39.	-7.
26216	DESOA3	DISTIL	-1.508	0.303	-1.508	2.005	0.25	-2759.	-63.	15.	-2223.	822.	56.	-0.71	19.	143.	50.	-39.
26216	DESOA3	RESIDU	-0.430	0.303	-0.430	0.483	0.11	-567.	20.	12.	-509.	118.	22.	-0.79	9.	0.	33.	-3.
26216	DESOA3	RESIDU	-1.508	0.303	-1.508	2.005	0.25	-6002.	-386.	3.	-5455.	545.	104.	-2.55	19.	143.	44.	-26.
26216	GTSUAD	DISTIL	-0.393	0.303	-0.393	0.483	0.18	62.	118.	15.	117.	204.	10.	0.70	21.	0.	14.	-4.
26216	GTSUAD	DISTIL	-0.560	0.303	-0.560	0.814	0.31	-6.	91.	15.	154.	354.	23.	0.68	45.	31.	21.	-5.
26216	GTRA08	DISTIL	0.	-0.097	0.	0.082	0.17	-13.	69.	8.	44.	167.	19.	0.49	18.	0.	19.	-4.
26216	GTRA08	DISTIL	0.	-0.464	0.	0.392	0.34	-201.	-34.	2.	75.	434.	53.	0.51	59.	63.	28.	-9.
26216	GTRA12	DISTIL	0.	-0.095	0.	0.084	0.17	-13.	70.	8.	45.	168.	19.	0.49	18.	0.	18.	-4.
26216	GTRA12	DISTIL	0.	-0.441	0.	0.392	0.34	-192.	-28.	3.	76.	428.	52.	0.52	59.	61.	27.	-8.
26216	GTRA16	DISTIL	0.	-0.094	0.	0.085	0.18	-13.	70.	8.	44.	168.	19.	0.49	18.	0.	19.	-4.
26216	GTRA16	DISTIL	0.	-0.408	0.	0.368	0.34	-178.	-18.	3.	71.	406.	49.	0.51	54.	56.	27.	-8.
26216	GTR208	DISTIL	0.	-0.094	0.	0.085	0.18	-16.	70.	8.	42.	168.	19.	0.49	19.	0.	17.	-4.
26216	GTR208	DISTIL	0.	-0.338	0.	0.303	0.32	-150.	1.	4.	56.	352.	42.	0.50	50.	43.	25.	-6.
26216	GTR212	DISTIL	0.	-0.095	0.	0.084	0.17	-15.	70.	8.	43.	168.	19.	0.49	19.	0.	18.	-4.
26216	GTR212	DISTIL	0.	-0.364	0.	0.324	0.33	-181.	-6.	4.	61.	370.	45.	0.51	52.	48.	26.	-7.
26216	GTR216	DISTIL	0.	-0.093	0.	0.086	0.18	-14.	70.	6.	44.	168.	19.	0.49	18.	0.	18.	-4.
26216	GTR216	DISTIL	0.	-0.366	0.	0.339	0.34	-162.	-6.	4.	65.	379.	46.	0.51	51.	49.	26.	-7.
26216	GTRW08	DISTIL	0.	-0.110	0.	0.069	0.14	-17.	66.	8.	41.	164.	19.	0.48	18.	0.	22.	-5.
26216	GTRW08	DISTIL	0.	-0.626	0.	0.393	0.30	-266.	-80.	-1.	82.	478.	60.	0.48	74.	79.	30.	-12.
26216	GTRW12	DISTIL	0.	-0.105	0.	0.074	0.15	-15.	67.	8.	43.	165.	19.	0.48	18.	0.	21.	-5.
26216	GTRW12	DISTIL	0.	-0.606	0.	0.428	0.32	-258.	-74.	-0.	75.	492.	61.	0.50	75.	80.	29.	-11.
26216	GTRW16	DISTIL	0.	-0.104	0.	0.075	0.16	-15.	67.	8.	43.	165.	19.	0.48	18.	0.	21.	-5.
26216	GTRW16	DISTIL	0.	-0.555	0.	0.403	0.32	-237.	-59.	1.	71.	464.	57.	0.50	69.	73.	29.	-10.
26216	GTR308	DISTIL	0.	-0.115	0.	0.064	0.13	-22.	64.	8.	36.	162.	19.	0.46	19.	0.	22.	-5.
26216	GTR308	DISTIL	0.	-0.500	0.	0.278	0.26	-215.	-44.	2.	35.	382.	48.	0.45	59.	56.	30.	-11.
26216	GTR312	DISTIL	0.	-0.102	0.	0.077	0.16	-16.	68.	8.	42.	166.	19.	0.48	19.	0.	19.	-5.
26216	GTR312	DISTIL	0.	-0.475	0.	0.357	0.31	-205.	-37.	2.	62.	418.	51.	0.49	63.	61.	27.	-9.
26216	GTR316	DISTIL	0.	-0.103	0.	0.076	0.16	-16.	68.	8.	42.	166.	19.	0.48	18.	0.	20.	-5.
26216	GTR316	DISTIL	0.	-0.469	0.	0.349	0.31	-203.	-35.	2.	60.	412.	50.	0.49	61.	60.	28.	-9.
26216	FCPADS	DISTIL	0.	-0.121	0.	0.058	0.12	14.	105.	11.	72.	203.	21.	0.63	14.	0.	41.	-8.
26216	FCPADS	DISTIL	0.	-1.214	0.	0.588	0.28	-190.	182.	15.	390.	1167.	122.	0.85	65.	152.	53.	-50.
26216	FCMCDS	DISTIL	0.	-0.101	0.	0.078	0.16	-60.	107.	9.	-2.	205.	19.	0.47	13.	0.	36.	-7.
26216	FCMCDS	DISTIL	0.	-0.803	0.	0.622	0.36	-729.	180.	-1.	-271.	960.	83.	0.47	48.	117.	48.	-33.
26217	STM141	RESIDU	0.	-0.033	0.	0.055	0.12	-12.	23.	-2.	15.	65.	-5.	0.17	13.	0.	39.	0.
26217	STM141	COAL-F	0.	-0.033	0.	0.055	0.12	-12.	-20.	-2.	17.	28.	4.	0.11	4.	0.	37.	2.
26217	STM141	COAL-A	0.	-0.033	0.	0.055	0.12	34.	-20.	-2.	63.	28.	4.	0.21	9.	0.	32.	2.
26217	STM088	RESIDU	0.	-0.023	0.	0.038	0.08	-8.	27.	-1.	10.	54.	-6.	0.13	12.	0.	42.	-0.
26217	STM088	COAL-F	0.	-0.023	0.	0.038	0.08	-8.	-14.	-1.	12.	20.	2.	0.08	3.	0.	39.	1.
26217	STM088	COAL-A	0.	-0.023	0.	0.038	0.08	36.	-14.	-1.	56.	20.	2.	0.18	7.	0.	35.	2.
26217	PFBSTM	COAL-P	0.	-0.058	0.	0.091	0.20	45.	-35.	5.	93.	46.	14.	0.35	5.	0.	34.	3.
26217	TISTMT	RESIDU	0.	-0.078	0.	0.124	0.27	-27.	5.	-4.	36.	107.	-2.	0.32	-20.	0.	60.	-3.
26217	TISTMT	COAL	0.	-0.078	0.	0.124	0.27	-27.	-47.	-4.	38.	63.	8.	0.25	-35.	0.	66.	-2.
26217	TIHRSG	RESIDU	0.	-0.057	0.	0.047	0.10	-20.	13.	-3.	12.	63.	-6.	0.16	-23.	0.	72.	-5.
26217	TIHRSG	COAL	0.	-0.057	0.	0.047	0.10	-20.	-34.	-3.	14.	23.	3.	0.09	-37.	0.	73.	-4.
26217	STIRL	DISTIL	0.	-0.141	0.	0.112	0.24	-11.	18.	4.	71.	157.	19.	0.56	17.	0.	32.	-2.

HONEYWELL PAGE PRINTING SYSTEM - FILE 28

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

PAGE 24

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S***** - - EMISSIONS SAVING S - -										CAPITL--ELECTRIC POWER--						
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
26217	STIRL	RESIDU	0.	-0.141	0.	0.112	0.24	-49.	-20.	-16.	30.	109.	-13.	0.28	17.	0.	28.	1.
26217	STIRL	COAL	0.	-0.141	0.	0.112	0.24	-49.	-85.	-7.	32.	54.	8.	0.21	1.	0.	34.	3.
26217	HEGT85	COAL-A	0.	-0.241	0.	0.040	0.09	-7.	-144.	-12.	84.	9.	5.	0.22	-29.	0.	68.	-3.
26217	HEGT85	COAL-A	0.	-1.119	0.	0.185	0.12	-173.	-672.	-56.	247.	42.	21.	0.22	-39.	96.	48.	-14.
26217	HEGT60	COAL-A	0.	-0.228	0.	0.052	0.11	-8.	-137.	-11.	82.	17.	5.	0.24	-24.	0.	62.	-2.
26217	HEGT60	COAL-A	0.	-0.348	0.	0.080	0.13	-33.	-209.	-17.	105.	25.	8.	0.24	-23.	14.	54.	-3.
26217	HEGT00	COAL-A	0.	-0.134	0.	0.039	0.09	6.	-80.	-7.	62.	14.	4.	0.18	-12.	0.	51.	-0.
26217	FCMCCL	COAL	0.	-0.131	0.	0.150	0.32	57.	98.	7.	148.	252.	24.	0.96	-10.	0.	44.	2.
26217	FCMCCL	COAL	0.	-0.144	0.	0.165	0.34	63.	108.	8.	162.	277.	26.	1.00	-7.	3.	41.	2.
26217	FCSTCL	COAL	0.	-0.125	0.	0.155	0.34	39.	67.	5.	129.	221.	22.	0.84	-10.	0.	44.	2.
26217	FCSTCL	COAL	0.	-0.202	0.	0.249	0.39	63.	108.	8.	208.	355.	35.	1.00	-4.	16.	36.	2.
26217	IGGTST	COAL	0.	-0.159	0.	0.122	0.26	-55.	-95.	7.	35.	58.	23.	0.26	-7.	0.	41.	2.
26217	IGGTST	COAL	0.	-0.176	0.	0.135	0.27	-61.	-105.	7.	38.	64.	26.	0.27	-4.	3.	38.	3.
26217	GTSOAR	RESIDU	-0.336	0.181	-0.336	0.461	0.27	-17.	-18.	6.	73.	135.	23.	0.53	22.	0.	21.	2.
26217	GTSOAR	RESIDU	-0.363	0.181	-0.363	0.509	0.29	-27.	-28.	6.	78.	152.	26.	0.53	26.	5.	21.	2.
26217	GTAC08	RESIDU	0.	-0.118	0.	0.134	0.29	-116.	-11.	-14.	-37.	118.	-11.	0.16	24.	0.	19.	3.
26217	GTAC12	RESIDU	0.	-0.134	0.	0.147	0.32	-120.	-17.	-14.	-32.	127.	-10.	0.19	24.	0.	17.	3.
26217	GTAC12	RESIDU	0.	-0.150	0.	0.165	0.33	-135.	-24.	-16.	-36.	139.	-11.	0.19	27.	3.	17.	3.
26217	GTAC16	RESIDU	0.	-0.136	0.	0.144	0.31	-117.	-18.	-14.	-29.	125.	-10.	0.19	23.	0.	19.	2.
26217	GTAC16	RESIDU	0.	-0.175	0.	0.184	0.34	-150.	-34.	-18.	-37.	152.	-11.	0.20	28.	7.	19.	3.
26217	GTWC16	RESIDU	0.	-0.149	0.	0.131	0.28	-123.	-24.	-15.	-36.	120.	-12.	0.16	23.	0.	20.	2.
26217	GTWC16	RESIDU	0.	-0.199	0.	0.175	0.32	-165.	-43.	-20.	-47.	150.	-13.	0.17	30.	9.	20.	2.
26217	CC1626	RESIDU	0.	-0.151	0.	0.129	0.28	-113.	-24.	-14.	-25.	119.	-11.	0.19	22.	0.	22.	1.
26217	CC1626	RESIDU	0.	-0.308	0.	0.262	0.35	-230.	-87.	-28.	-50.	210.	-14.	0.20	42.	27.	23.	1.
26217	CC1622	RESIDU	0.	-0.145	0.	0.135	0.29	-112.	-22.	-14.	-24.	122.	-10.	0.20	22.	0.	21.	2.
26217	CC1622	RESIDU	0.	-0.265	0.	0.247	0.36	-204.	-70.	-25.	-43.	197.	-13.	0.22	37.	22.	22.	2.
26217	CC1222	RESIDU	0.	-0.144	0.	0.137	0.30	-111.	-21.	-14.	-23.	122.	-10.	0.20	22.	0.	20.	2.
26217	CC1222	RESIDU	0.	-0.261	0.	0.248	0.36	-202.	-68.	-25.	-41.	197.	-12.	0.22	38.	21.	21.	2.
26217	CC0822	RESIDU	0.	-0.134	0.	0.146	0.32	-112.	-17.	-14.	-24.	126.	-10.	0.21	23.	0.	19.	2.
26217	CC0822	RESIDU	0.	-0.193	0.	0.210	0.36	-161.	-41.	-20.	-34.	168.	-11.	0.22	32.	11.	19.	3.
26217	STIG15	RESIDU	0.	-0.232	0.	0.048	0.11	-140.	-57.	-7.	-53.	84.	-7.	0.06	21.	0.	33.	-2.
26217	STIG15	RESIDU	0.	-11.644	0.	2.435	0.17	-7031.	-4621.	-346.	-2591.	2724.	15.	0.01	876.	1294.	37.	-181.
26217	STIG10	RESIDU	0.	-0.211	0.	0.069	0.15	-136.	-48.	-6.	-49.	93.	-5.	0.09	22.	0.	29.	-1.
26217	STIG10	RESIDU	0.	-0.979	0.	0.323	0.22	-633.	-356.	-26.	-223.	322.	5.	0.07	87.	96.	32.	-11.
26217	STIG1S	RESIDU	0.	-0.201	0.	0.079	0.17	-137.	-44.	-5.	-50.	98.	-3.	0.10	23.	0.	28.	-0.
26217	STIG1S	RESIDU	0.	-0.548	0.	0.215	0.23	-374.	-183.	-13.	-134.	213.	3.	0.09	56.	45.	29.	-4.
26217	DEADV3	RESIDU	0.	-0.183	0.	0.097	0.21	-209.	-37.	-16.	-122.	105.	-14.	-0.07	13.	0.	33.	-1.
26217	DEADV3	RESIDU	0.	-0.569	0.	0.300	0.29	-649.	-191.	-48.	-375.	262.	-27.	-0.14	28.	55.	37.	-7.
26217	DEHTPM	RESIDU	0.	-0.136	0.	0.144	0.31	-212.	-18.	-14.	-124.	126.	-10.	-0.02	12.	0.	26.	1.
26217	DEHTPM	RESIDU	0.	-0.178	0.	0.189	0.34	-278.	-35.	-18.	-162.	155.	-11.	-0.04	15.	8.	29.	1.
26217	DESOA3	DISTIL	-0.379	0.181	-0.379	0.461	0.18	-412.	47.	9.	-325.	189.	10.	-0.28	8.	0.	45.	-5.
26217	DESOA3	DISTIL	-0.899	0.181	-0.899	1.195	0.25	-1645.	-38.	9.	-1325.	490.	33.	-0.71	13.	69.	49.	-20.
26217	DESOA3	RESIDU	-0.379	0.181	-0.379	0.461	0.18	-958.	-34.	6.	-867.	119.	23.	-1.65	8.	0.	40.	-2.
26217	DESOA3	RESIDU	-0.899	0.181	-0.899	1.195	0.25	-3578.	-230.	2.	-3252.	325.	62.	-2.55	13.	69.	44.	-13.
26217	GTSOAD	DISTIL	-0.322	0.181	-0.322	0.461	0.30	1.	56	9.	89.	200.	13.	0.68	25.	0.	21.	-0.
26217	GTSOAD	STIL	-0.334	0.181	-0.334	0.485	0.31	-3.	54.	9.	92.	211.	14.	0.68	28.	2.	20.	-0.

HONEYWELL PAGE PRINTING SYSTEM - P118-03

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

PAGE 25

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS

EMISSION UNITS=

COST = \$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVINGS*****										*****EMISSIONS SAVINGS*****										CAPITL--ELECTRIC POWER---			
		ECS ****DIRECT****		TOTAL		FESR		DIRECT		TOTAL		FESR		DIRECT		TOTAL		EMSR SAVING	TOTAL EXPORT	COST LAEC	POWER--				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	NOX	SOX	PART	NOX	SOX					PART			
26217	GTRA08	DISTIL	0.	-0.152	0.	0.128	0.28	-56.	15.	3.	34.	168.	20.	0.50	21.	0.	27.	-1.							
26217	GTRA08	DISTIL	0.	-0.276	0.	0.234	0.34	-120.	-20.	1.	45.	259.	31.	0.51	36.	22.	27.	-2.							
26217	GTRA12	DISTIL	0.	-0.149	0.	0.132	0.29	-55.	16.	3.	35.	169.	20.	0.51	21.	0.	26.	-1.							
26217	GTRA12	DISTIL	0.	-0.263	0.	0.234	0.34	-114.	-16.	1.	46.	255.	31.	0.52	35.	20.	27.	-2.							
26217	GTRA16	DISTIL	0.	-0.147	0.	0.133	0.29	-56.	16.	3.	34.	169.	20.	0.51	20.	0.	27.	-1.							
26217	GTRA16	DISTIL	0.	-0.243	0.	0.219	0.34	-106.	-11.	2.	42.	242.	29.	0.51	32.	17.	27.	-2.							
26217	GTR208	DISTIL	0.	-0.148	0.	0.133	0.29	-60.	16.	3.	30.	169.	20.	0.50	22.	0.	25.	-1.							
26217	GTR208	DISTIL	0.	-0.201	0.	0.181	0.32	-90.	1.	3.	33.	210.	25.	0.50	30.	10.	25.	-1.							
26217	GTR212	DISTIL	0.	-0.148	0.	0.132	0.29	-59.	16.	3.	32.	169.	20.	0.50	22.	0.	25.	-1.							
26217	GTR212	DISTIL	0.	-0.217	0.	0.193	0.33	-96.	-3.	2.	36.	221.	27.	0.51	31.	12.	25.	-1.							
26217	GTR216	DISTIL	0.	-0.146	0.	0.135	0.29	-57.	17.	3.	33.	170.	20.	0.51	21.	0.	26.	-1.							
26217	GTR216	DISTIL	0.	-0.218	0.	0.202	0.34	-96.	-4.	2.	39.	226.	27.	0.51	30.	13.	26.	-1.							
26217	GTRW08	DISTIL	0.	-0.172	0.	0.108	0.23	-61.	9.	3.	29.	162.	20.	0.48	21.	0.	30.	-2.							
26217	GTRW08	DISTIL	0.	-0.373	0.	0.235	0.30	-158.	-48.	-0.	37.	285.	36.	0.48	43.	31.	30.	-5.							
26217	GTRW12	DISTIL	0.	-0.164	0.	0.116	0.25	-58.	11.	3.	32.	165.	20.	0.49	21.	0.	28.	-2.							
26217	GTRW12	DISTIL	0.	-0.361	0.	0.255	0.32	-154.	-44.	-0.	45.	293.	36.	0.50	44.	32.	29.	-4.							
26217	GTRW16	DISTIL	0.	-0.162	0.	0.118	0.26	-58.	12.	3.	32.	165.	20.	0.49	20.	0.	29.	-2.							
26217	GTRW16	DISTIL	0.	-0.331	0.	0.240	0.32	-141.	-35.	0.	42.	277.	34.	0.50	40.	27.	29.	-4.							
26217	GTR308	DISTIL	0.	-0.180	0.	0.100	0.22	-69.	7.	3.	21.	160.	20.	0.46	22.	0.	30.	-2.							
26217	GTR308	DISTIL	0.	-0.298	0.	0.166	0.26	-128.	-26.	1.	21.	227.	28.	0.45	35.	17.	30.	-4.							
26217	GTR312	DISTIL	0.	-0.160	0.	0.120	0.26	-60.	13.	3.	30.	165.	20.	0.49	22.	0.	27.	-2.							
26217	GTR312	DISTIL	0.	-0.283	0.	0.213	0.31	-122.	-22.	1.	37.	249.	31.	0.49	37.	20.	27.	-3.							
26217	GTR316	DISTIL	0.	-0.161	0.	0.120	0.26	-60.	12.	3.	30.	166.	20.	0.49	21.	0.	28.	-2.							
26217	GTR316	DISTIL	0.	-0.280	0.	0.208	0.31	-121.	-21.	1.	36.	246.	30.	0.49	36.	19.	28.	-3.							
26217	FCPADS	DISTIL	0.	-0.189	0.	0.091	0.20	-13.	71.	7.	77.	224.	23.	0.74	15.	0.	48.	-7.							
26217	FCPADS	DISTIL	0.	-0.723	0.	0.350	0.28	-113.	109.	9.	232.	696.	73.	0.85	40.	74.	52.	-27.							
26217	FCMCDS	DISTIL	0.	-0.158	0.	0.122	0.27	-129.	74.	4.	-39.	227.	20.	0.47	14.	0.	43.	-5.							
26217	FCMCDS	DISTIL	0.	-0.479	0.	0.371	0.36	-435.	108.	-1.	-162.	572.	49.	0.47	30.	53.	47.	-17.							
26218	STM141	RESIDU	0.	-0.046	0.	0.077	0.20	-16.	30.	-2.	21.	88.	-7.	0.28	18.	0.	2.	0.							
26218	STM141	COAL-F	0.	-0.046	0.	0.077	0.20	-16.	-28.	-2.	23.	39.	5.	0.13	6.	0.	21.	3.							
26218	STM141	COAL-A	0.	-0.046	0.	0.077	0.20	46.	-28.	-2.	85.	39.	5.	0.35	12.	0.	10.	3.							
26218	STM088	RESIDU	0.	-0.033	0.	0.054	0.15	-12.	35.	-2.	15.	75.	-7.	0.22	16.	0.	12.	-0.							
26218	STM088	COAL-F	0.	-0.033	0.	0.054	0.15	-12.	-20.	-2.	17.	28.	4.	0.13	5.	0.	28.	2.							
26218	STM088	COAL-A	0.	-0.033	0.	0.054	0.15	47.	-20.	-2.	76.	28.	4.	0.29	10.	0.	18.	3.							
26218	PFBSTM	COAL-P	0.	-0.053	0.	0.082	0.22	57.	-32.	5.	101.	42.	13.	0.42	1.	0.	35.	1.							
26218	PFBSTM	COAL-P	0.	-0.080	0.	0.125	0.28	60.	-48.	7.	126.	64.	19.	0.49	8.	7.	24.	3.							
26218	TISTMT	RESIDU	0.	-0.052	0.	0.082	0.22	-18.	27.	-3.	23.	92.	-6.	0.30	-13.	0.	59.	-4.							
26218	TISTMT	RESIDU	0.	-0.107	0.	0.169	0.33	-37.	6.	-5.	49.	146.	-3.	0.39	-24.	13.	57.	-6.							
26218	TISTMT	COAL	0.	-0.052	0.	0.082	0.22	-18.	-31.	-3.	25.	42.	5.	0.20	-30.	0.	90.	-2.							
26218	TISTMT	COAL	0.	-0.107	0.	0.169	0.33	-37.	-64.	-5.	51.	87.	11.	0.30	-42.	13.	69.	-3.							
26218	TIHRSG	RESIDU	0.	-0.073	0.	0.061	0.16	-26.	19.	-4.	15.	83.	-8.	0.25	-28.	0.	92.	-6.							
26218	TIHRSG	RESIDU	0.	-0.076	0.	0.063	0.17	-27.	18.	-4.	16.	85.	-8.	0.25	-28.	0.	90.	-6.							
26218	TIHRSG	COAL	0.	-0.073	0.	0.061	0.16	-26.	-44.	-4.	18.	29.	4.	0.14	-45.	0.	120.	-5.							
26218	TIHRSG	COAL	0.	-0.076	0.	0.063	0.17	-27.	-46.	-4.	18.	31.	4.	0.14	-45.	0.	115.	-4.							
26218	STIRL	DISTIL	0.	-0.075	0.	0.059	0.16	12.	56.	7.	55.	129.	15.	0.54	13.	0.	22.	-4.							
26218	STIRL	DISTIL	0.	-0.188	0.	0.150	0.26	-14.	24.	5.	94.	209.	25.	0.59	21.	19.	30.	-6.							

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS *

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS***** - - - EMISSIONS SAVINGS - - -										CAPITL--ELECTRIC POWER---						
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
26218	STIRL	RESIDU	0.	-0.075	0.	0.059	0.16	-26.	18.	-8.	15.	82.	-13.	0.23	13.	0.	17.	-1.
26218	STIRL	RESIDU	0.	-0.188	0.	0.150	0.26	-66.	-27.	-21.	40.	145.	-18.	0.30	21.	19.	26.	-2.
26218	STIRL	COAL	0.	-0.075	0.	0.059	0.16	-26.	-45.	-4.	17.	29.	4.	0.14	-4.	0.	45.	1.
26218	STIRL	COAL	0.	-0.188	0.	0.150	0.26	-66.	-113.	-9.	43.	72.	11.	0.23	-1.	19.	35.	1.
26218	HEGT85	COAL-A	0.	-0.115	0.	0.019	0.05	30.	-69.	-6.	73.	4.	2.	0.22	-19.	0.	79.	-2.
26218	HEGT85	COAL-A	0.	-1.492	0.	0.247	0.12	-230.	-895.	-75.	329.	36.	28.	0.22	-35.	150.	46.	-19.
26218	HEGT60	COAL-A	0.	-0.109	0.	0.025	0.07	29.	-66.	-5.	73.	8.	2.	0.23	-17.	0.	74.	-2.
26218	HEGT60	COAL-A	0.	-0.464	0.	0.107	0.13	-44.	-278.	-23.	140.	34.	11.	0.24	-25.	41.	51.	-6.
26218	HEGT00	COAL-A	0.	-0.104	0.	0.030	0.08	26.	-62.	-5.	70.	11.	3.	0.23	-14.	0.	68.	-1.
26218	HEGT00	COAL-A	0.	-0.179	0.	0.052	0.11	8.	-107.	-9.	82.	19.	5.	0.23	-13.	9.	53.	-1.
26218	FCMCCL	COAL	0.	-0.063	0.	0.072	0.19	27.	47.	4.	71.	121.	12.	0.55	-12.	0.	59.	-0.
26218	FCMCCL	COAL	0.	-0.192	0.	0.219	0.34	84.	144.	11.	217.	369.	35.	1.00	-6.	26.	39.	-0.
26218	FCSTCL	COAL	0.	-0.060	0.	0.074	0.20	19.	32.	2.	62.	105.	10.	0.48	-11.	0.	57.	-0.
26218	FCSTCL	COAL	0.	-0.272	0.	0.337	0.40	84.	144.	11.	280.	478.	47.	1.00	-1.	45.	34.	0.
26218	IGGTST	COAL	0.	-0.076	0.	0.059	0.16	-26.	-45.	3.	17.	28.	11.	0.15	-10.	0.	57.	-0.
26218	IGGTST	COAL	0.	-0.237	0.	0.184	0.28	-83.	-142.	10.	52.	88.	35.	0.28	-2.	27.	35.	1.
26218	GTSGAR	RESIDU	-0.315	0.241	-0.315	0.375	0.16	29.	26.	10.	72.	99.	17.	0.52	15.	0.	13.	-1.
26218	GTSGAR	RESIDU	-0.483	0.241	-0.483	0.679	0.29	-36.	-37.	8.	104.	202.	34.	0.53	35.	28.	21.	-1.
26218	GTAC08	RESIDU	0.	-0.063	0.	0.072	0.19	-62.	23.	-7.	-21.	87.	-12.	0.15	16.	0.	7.	-0.
26218	GTAC08	RESIDU	0.	-0.157	0.	0.179	0.31	-155.	-15.	-18.	-49.	157.	-14.	0.17	31.	19.	15.	0.
26218	GTAC12	RESIDU	0.	-0.064	0.	0.070	0.19	-58.	23.	-7.	-17.	87.	-11.	0.16	16.	0.	8.	-0.
26218	GTAC12	RESIDU	0.	-0.200	0.	0.220	0.33	-181.	-32.	-22.	-48.	185.	-14.	0.19	35.	27.	17.	0.
26218	GTAC16	RESIDU	0.	-0.065	0.	0.069	0.18	-56.	22.	-7.	-15.	86.	-11.	0.16	15.	0.	9.	-1.
26218	GTAC16	RESIDU	0.	-0.233	0.	0.246	0.34	-200.	-45.	-24.	-50.	203.	-15.	0.20	36.	32.	19.	-0.
26218	GTWC16	RESIDU	0.	-0.072	0.	0.063	0.17	-59.	20.	-7.	-18.	84.	-12.	0.15	15.	0.	11.	-1.
26218	GTWC16	RESIDU	0.	-0.265	0.	0.233	0.32	-220.	-58.	-27.	-63.	200.	-17.	0.17	40.	34.	20.	-1.
26218	CC1626	RESIDU	0.	-0.072	0.	0.062	0.16	-54.	19.	-7.	-13.	83.	-11.	0.16	15.	0.	13.	-1.
26218	CC1626	RESIDU	0.	-0.415	0.	0.354	0.35	-309.	-118.	-38.	-67.	283.	-19.	0.21	57.	60.	22.	-2.
26218	CC1622	RESIDU	0.	-0.069	0.	0.065	0.17	-53.	20.	-7.	-12.	85.	-11.	0.17	15.	0.	11.	-1.
26218	CC1622	RESIDU	0.	-0.357	0.	0.334	0.36	-275.	-95.	-34.	-57.	266.	-17.	0.22	50.	52.	22.	-1.
26218	CC1222	RESIDU	0.	-0.069	0.	0.063	0.17	-53.	21.	-7.	-12.	85.	-11.	0.17	16.	0.	10.	-1.
26218	CC1222	RESIDU	0.	-0.352	0.	0.336	0.36	-272.	-93.	-33.	-55.	266.	-16.	0.22	51.	52.	21.	-1.
26218	CC0822	RESIDU	0.	-0.064	0.	0.070	0.19	-53.	23.	-6.	-12.	87.	-11.	0.17	16.	0.	9.	-1.
26218	CC0822	RESIDU	0.	-0.260	0.	0.285	0.36	-216.	-56.	-26.	-45.	228.	-14.	0.23	43.	39.	19.	0.
26218	STIG15	RESIDU	0.	-0.111	0.	0.023	0.06	-67.	4.	-3.	-27.	67.	-9.	0.08	15.	0.	23.	-2.
26218	STIG15	RESIDU	0.	-15.525	0.	3.247	0.17	-9375.	-8162.	-461.	-3454.	3631.	20.	0.01	1174.	1748.	36.	-244.
26218	STIG10	RESIDU	0.	-0.101	0.	0.033	0.09	-65.	8.	-3.	-25.	71.	-8.	0.10	16.	0.	19.	-2.
26218	STIG10	RESIDU	0.	-1.306	0.	0.430	0.22	-844.	-474.	-34.	-297.	429.	7.	0.07	118.	150.	32.	-17.
26218	STIG15	RESIDU	0.	-0.096	0.	0.038	0.10	-66.	10.	-2.	-25.	73.	-8.	0.11	16.	0.	17.	-2.
26218	STIG15	RESIDU	0.	-0.731	0.	0.287	0.23	-499.	-244.	-17.	-179.	284.	4.	0.09	72.	83.	30.	-9.
26218	DEADV3	RESIDU	0.	-0.088	0.	0.046	0.12	-100.	13.	-7.	-60.	77.	-13.	0.01	9.	0.	28.	-2.
26218	DEADV3	RESIDU	0.	-0.759	0.	0.400	0.29	-666.	-255.	-64.	-500.	349.	-36.	-0.14	36.	96.	37.	-13.
26218	DEHTPM	RESIDU	0.	-0.065	0.	0.069	0.18	-102.	22.	-7.	-61.	86.	-11.	0.04	11.	0.	18.	-1.
26218	DEHTPM	RESIDU	0.	-0.237	0.	0.252	0.34	-370.	-47.	-25.	-216.	206.	-15.	-0.04	19.	33.	29.	-3.
26218	DES0A3	DISTIL	-0.336	0.241	-0.336	0.375	0.10	-147.	97.	12.	-107.	153.	7.	0.15	9.	0.	35.	-5.
26218	DES0A3	DISTIL	-1.199	0.241	-1.199	1.593	0.25	-2193.	-5.	12.	-1767.	654.	44.	-0.71	16.	114.	50.	-31.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING \$***** - - EMISSIONS SAVING \$ - - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****		TOTAL		FESR		DIRECT		TOTAL		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX						PART	EXPORT
26218	DES0A3	RESIDU	-0.336	0.241	-0.336	0.375	0.10	-422.	18.	9.	-379.	92.	17.	-0.74	9.	0.	29.	-3.
26218	DES0A3	RESIDU	-1.199	0.241	-1.199	1.593	0.25	-4770.	-307.	2.	-4335.	433.	83.	-2.55	16.	114.	44.	-21.
26218	QTS0AD	DISTIL	-0.309	0.241	-0.309	0.375	0.18	51.	95.	12.	92.	159.	8.	0.71	16.	0.	12.	-3.
26218	QTS0AD	DISTIL	-0.445	0.241	-0.445	0.647	0.31	-5.	72.	12.	123.	281.	18.	0.68	36.	25.	21.	-4.
26218	GTRA08	DISTIL	0.	-0.073	0.	0.062	0.16	-8.	56.	7.	35.	130.	15.	0.49	14.	0.	17.	-4.
26218	GTRA08	DISTIL	0.	-0.368	0.	0.312	0.34	-159.	-27.	2.	59.	345.	42.	0.51	46.	51.	28.	-7.
26218	GTRA12	DISTIL	0.	-0.071	0.	0.063	0.17	-8.	57.	7.	35.	130.	15.	0.49	14.	0.	17.	-3.
26218	GTRA12	DISTIL	0.	-0.351	0.	0.311	0.34	-152.	-22.	2.	61.	340.	41.	0.52	47.	50.	27.	-6.
26218	GTRA16	DISTIL	0.	-0.071	0.	0.064	0.17	-8.	57.	7.	35.	130.	15.	0.49	14.	0.	18.	-4.
26218	GTRA16	DISTIL	0.	-0.324	0.	0.292	0.34	-142.	-15.	2.	57.	323.	39.	0.51	42.	45.	27.	-6.
26218	GTR208	DISTIL	0.	-0.071	0.	0.064	0.17	-10.	57.	7.	33.	130.	15.	0.49	15.	0.	16.	-3.
26218	GTR208	DISTIL	0.	-0.269	0.	0.241	0.32	-119.	1.	3.	44.	280.	34.	0.50	40.	35.	25.	-5.
26218	GTR212	DISTIL	0.	-0.071	0.	0.063	0.17	-10.	57.	7.	34.	130.	15.	0.49	15.	0.	16.	-3.
26218	GTR212	DISTIL	0.	-0.289	0.	0.258	0.33	-128.	-5.	3.	48.	294.	35.	0.51	41.	39.	26.	-5.
26218	GTR216	DISTIL	0.	-0.070	0.	0.065	0.17	-9.	57.	7.	34.	131.	15.	0.49	14.	0.	16.	-3.
26218	GTR216	DISTIL	0.	-0.291	0.	0.269	0.34	-129.	-5.	3.	52.	301.	36.	0.51	40.	40.	26.	-5.
26218	GTRW08	DISTIL	0.	-0.083	0.	0.052	0.14	-11.	54.	7.	32.	127.	15.	0.48	14.	0.	21.	-4.
26218	GTRW08	DISTIL	0.	-0.498	0.	0.313	0.30	-211.	-63.	-1.	50.	380.	47.	0.48	58.	63.	30.	-10.
26218	GTRW12	DISTIL	0.	-0.079	0.	0.056	0.15	-9.	55.	7.	34.	128.	15.	0.48	14.	0.	19.	-4.
26218	GTRW12	DISTIL	0.	-0.482	0.	0.341	0.32	-205.	-59.	-0.	60.	391.	48.	0.50	59.	65.	29.	-9.
26218	GTRW16	DISTIL	0.	-0.078	0.	0.057	0.15	-9.	55.	7.	34.	128.	15.	0.48	14.	0.	20.	-4.
26218	GTRW16	DISTIL	0.	-0.441	0.	0.320	0.32	-188.	-47.	0.	56.	369.	45.	0.50	54.	59.	29.	-8.
26218	GTR308	DISTIL	0.	-0.086	0.	0.048	0.13	-14.	52.	6.	29.	126.	14.	0.46	15.	0.	21.	-4.
26218	GTR308	DISTIL	0.	-0.398	0.	0.221	0.26	-171.	-35.	1.	28.	303.	38.	0.45	47.	45.	30.	-9.
26218	GTR312	DISTIL	0.	-0.077	0.	0.058	0.15	-10.	55.	7.	33.	129.	15.	0.48	15.	0.	18.	-4.
26218	GTR312	DISTIL	0.	-0.377	0.	0.284	0.31	-163.	-29.	2.	50.	332.	41.	0.49	50.	49.	27.	-7.
26218	GTR316	DISTIL	0.	-0.077	0.	0.057	0.15	-10.	55.	7.	33.	129.	15.	0.48	14.	0.	19.	-4.
26218	GTR316	DISTIL	0.	-0.373	0.	0.278	0.31	-161.	-28.	2.	48.	328.	40.	0.49	48.	48.	28.	-7.
26218	FCPADS	DISTIL	0.	-0.091	0.	0.044	0.12	12.	83.	8.	55.	157.	16.	0.62	12.	0.	37.	-6.
26218	FCPADS	DISTIL	0.	-0.965	0.	0.467	0.28	-151.	145.	12.	310.	928.	97.	0.85	53.	122.	53.	-40.
26218	FCMCDS	DISTIL	0.	-0.076	0.	0.059	0.16	-43.	85.	7.	-0.	158.	15.	0.47	12.	0.	32.	-5.
26218	FCMCDS	DISTIL	0.	-0.639	0.	0.494	0.36	-580.	143.	-1.	-215.	763.	66.	0.47	39.	94.	48.	-26.
26	FCMCDS	DISTIL	-31.420	*****	-31.420	155.870	12.84	*****	-63234.	-6009.	-39866.	140061.	7931.	0.25	20447.	25072.	13902.	-3658.
28121	STM141	RESIDU	0.	-0.062	0.	0.103	0.08	-22.	28.	-3.	29.	109.	-6.	0.10	21.	0.	50.	1.
28121	STM141	COAL-F	0.	-0.062	0.	0.103	0.08	-22.	-37.	-3.	31.	53.	7.	0.07	8.	0.	40.	4.
28121	STM141	COAL-A	0.	-0.062	0.	0.103	0.08	49.	-37.	-3.	102.	53.	7.	0.13	15.	0.	39.	5.
28121	STM088	RESIDU	0.	-0.047	0.	0.078	0.06	-16.	34.	-2.	21.	93.	-7.	0.08	19.	0.	51.	0.
28121	STM088	COAL-F	0.	-0.047	0.	0.078	0.06	-16.	-28.	-2.	24.	40.	5.	0.05	6.	0.	41.	3.
28121	STM088	COAL-A	0.	-0.047	0.	0.078	0.06	51.	-28.	-2.	91.	40.	5.	0.11	12.	0.	40.	3.
28121	PFBSTM	COAL-P	0.	-0.100	0.	0.156	0.12	65.	-60.	8.	148.	81.	23.	0.20	11.	0.	39.	5.
28121	TISTMT	RESIDU	0.	-0.131	0.	0.209	0.15	-46.	1.	-7.	60.	174.	-2.	0.18	-24.	0.	57.	-3.
28121	TISTMT	COAL	0.	-0.131	0.	0.209	0.15	-46.	-79.	-7.	63.	107.	14.	0.14	-43.	0.	50.	-1.
28121	TIHRSG	RESIDU	0.	-0.079	0.	0.072	0.05	-28.	21.	-4.	18.	94.	-9.	0.08	-30.	0.	62.	-7.
28121	TIHRSG	COAL	0.	-0.079	0.	0.072	0.05	-28.	-47.	-4.	21.	35.	5.	0.05	-47.	0.	53.	-4.
28121	STIRL	DISTIL	0.	-0.214	0.	0.173	0.13	-17.	24.	5.	107.	236.	28.	0.29	23.	0.	53.	-3.
28121	STIRL	RESIDU	0.	-0.214	0.	0.173	0.13	-75.	-32.	-23.	46.	165.	-20.	0.15	23.	0.	47.	1.

HONEYWELL PAGE PRINTING SYSTEM- 81189-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

PAGE 28

FUEL UNITS =

EMISSION UNITS =

COST

=\$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

ALTERNATIVES STUDY

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****								EMSR	CAPITL--ELECTRIC POWER---		
		DIRECT-----TOTAL-----		FESR-----DIRECT-----TOTAL-----		NOX SOX PART NOX SOX PART		NOX SOX PART NOX SOX PART		SAVING	TOTAL COST	EXPORT LAEC					
		FUEL OIL+GAS	COAL OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	PART			MWH		SAVED	
28121	STIRL	COAL	0.	-0.214	0.	0.173	0.13	-75.	-128.	-11.	50.	83.	12.	0.11	0.	40.	5.
28121	HEGT85	COAL-A	0.	-0.881	0.	0.207	0.15	-112.	-528.	-44.	238.	66.	20.	0.25	-40.	49.	1.
28121	HEGT85	COAL-A	0.	-1.147	0.	0.269	0.16	-164.	-688.	-57.	292.	86.	27.	0.26	-35.	46.	-1.
28121	HEGT60	COAL-A	0.	-0.448	0.	0.129	0.10	-37.	-269.	-22.	149.	47.	12.	0.16	-24.	47.	1.
28121	HEGT00	COAL-A	0.	-0.190	0.	0.060	0.04	10.	-114.	-9.	91.	23.	5.	0.09	-13.	46.	0.
28121	FCMCCL	COAL	0.	-0.210	0.	0.241	0.18	93.	159.	12.	238.	406.	39.	0.54	-6.	41.	4.
28121	FCSTCL	COAL	0.	-0.320	0.	0.400	0.30	92.	159.	12.	324.	552.	54.	0.73	2.	37.	9.
28121	IGGTST	COAL	0.	-0.280	0.	0.225	0.17	-98.	-168.	11.	65.	108.	40.	0.17	1.	39.	6.
28121	GTSDAR	RESIDU	-0.521	0.265	-0.521	0.737	0.16	-38.	-37.	9.	114.	221.	37.	0.29	37.	42.	4.
28121	GTAC08	RESIDU	0.	-0.174	0.	0.196	0.15	-170.	-16.	-20.	-55.	173.	-16.	0.08	33.	44.	4.
28121	GTAC12	RESIDU	0.	-0.219	0.	0.242	0.18	-198.	-35.	-24.	-53.	203.	-16.	0.11	38.	41.	5.
28121	GTAC16	RESIDU	0.	-0.252	0.	0.270	0.20	-217.	-48.	-26.	-53.	222.	-16.	0.12	40.	39.	5.
28121	GTWC16	RESIDU	0.	-0.292	0.	0.256	0.19	-241.	-64.	-29.	-69.	219.	-19.	0.10	43.	39.	5.
28121	CC1626	RESIDU	0.	-0.482	0.	0.420	0.31	-356.	-140.	-44.	-71.	331.	-20.	0.19	65.	29.	9.
28121	CC1622	RESIDU	0.	-0.416	0.	0.396	0.29	-316.	-113.	-39.	-60.	310.	-18.	0.18	58.	31.	8.
28121	CC1222	RESIDU	0.	-0.411	0.	0.398	0.29	-313.	-111.	-38.	-57.	311.	-18.	0.19	59.	31.	9.
28121	CC0822	RESIDU	0.	-0.306	0.	0.341	0.25	-250.	-69.	-30.	-46.	267.	-15.	0.16	50.	35.	7.
28121	STIG15	RESIDU	0.	-0.899	0.	0.188	0.14	-343.	-307.	-27.	-202.	253.	-9.	0.03	69.	36.	-2.
28121	STIG15	RESIDU	0.	-17.062	0.	3.568	0.17	-10303.	-6772.	-507.	-3796.	3991.	22.	0.01	1274.	1833.	-254.
28121	STIG10	RESIDU	0.	-0.818	0.	0.269	0.20	-529.	-274.	-22.	-187.	288.	-0.	0.08	72.	32.	2.
28121	STIG10	RESIDU	0.	-1.435	0.	0.473	0.22	-927.	-521.	-38.	-326.	471.	7.	0.07	124.	33.	-6.
28121	STIG1S	RESIDU	0.	-0.781	0.	0.307	0.23	-533.	-259.	-18.	-191.	304.	4.	0.09	75.	30.	4.
28121	STIG1S	RESIDU	0.	-0.804	0.	0.316	0.23	-548.	-268.	-19.	-196.	312.	5.	0.09	78.	30.	3.
28121	DEADV3	RESIDU	0.	-0.699	0.	0.389	0.29	-807.	-227.	-60.	-465.	339.	-34.	-0.13	34.	37.	2.
28121	DEADV3	RESIDU	0.	-0.774	0.	0.431	0.29	-894.	-257.	-66.	-514.	371.	-36.	-0.13	38.	37.	1.
28121	DEHTPM	RESIDU	0.	-0.259	0.	0.294	0.22	-405.	-51.	-27.	-231.	236.	-15.	-0.01	22.	43.	3.
28121	DES0A3	DISTIL	-1.022	0.265	-1.022	1.353	0.24	-1740.	-7.	13.	-1398.	557.	37.	-0.63	14.	49.	-11.
28121	DES0A3	DISTIL	-1.232	0.265	-1.232	1.655	0.26	-2248.	-41.	13.	-1810.	682.	46.	-0.70	17.	49.	-17.
28121	DES0A3	RESIDU	-1.022	0.265	-1.022	1.353	0.24	-3818.	-226.	5.	-3468.	369.	69.	-2.38	14.	43.	-3.
28121	DES0A3	RESIDU	-1.232	0.265	-1.232	1.655	0.26	-4897.	-305.	3.	-4450.	455.	86.	-2.51	17.	43.	-7.
28121	GTSDAD	DISTIL	-0.486	0.255	-0.486	0.708	0.16	-4.	80.	13.	135.	308.	20.	0.36	39.	48.	0.
28121	GTRA08	DISTIL	0.	-0.383	0.	0.340	0.25	-166.	-23.	2.	66.	372.	45.	0.38	49.	40.	1.
28121	GTRA12	DISTIL	0.	-0.368	0.	0.340	0.25	-160.	-19.	2.	67.	368.	44.	0.38	50.	40.	2.
28121	GTRA16	DISTIL	0.	-0.342	0.	0.320	0.24	-150.	-12.	3.	63.	350.	42.	0.36	45.	42.	1.
28121	GTR208	DISTIL	0.	-0.286	0.	0.265	0.20	-128.	4.	4.	50.	305.	37.	0.31	42.	45.	0.
28121	GTR212	DISTIL	0.	-0.308	0.	0.283	0.21	-137.	-2.	4.	54.	321.	38.	0.32	44.	44.	1.
28121	GTR216	DISTIL	0.	-0.310	0.	0.296	0.22	-137.	-3.	3.	58.	328.	39.	0.33	43.	44.	1.
28121	GTRW08	DISTIL	0.	-0.523	0.	0.341	0.25	-223.	-63.	-0.	56.	410.	51.	0.41	62.	37.	0.
28121	GTRW12	DISTIL	0.	-0.510	0.	0.372	0.27	-217.	-59.	0.	66.	423.	52.	0.43	63.	36.	1.
28121	GTRW16	DISTIL	0.	-0.470	0.	0.350	0.26	-201.	-48.	1.	63.	401.	49.	0.40	58.	38.	1.
28121	GTR308	DISTIL	0.	-0.417	0.	0.244	0.18	-180.	-33.	2.	33.	328.	41.	0.32	50.	44.	-2.
28121	GTR312	DISTIL	0.	-0.407	0.	0.311	0.23	-176.	-30.	2.	55.	363.	44.	0.36	54.	40.	1.
28121	GTR316	DISTIL	0.	-0.403	0.	0.305	0.23	-174.	-29.	2.	53.	358.	44.	0.36	52.	41.	0.
28121	FCPADS	DISTIL	0.	-0.733	0.	0.355	0.26	-105.	136.	12.	245.	731.	76.	0.83	41.	5.	-18.
28121	FCPADS	DISTIL	0.	-1.060	0.	0.513	0.28	-166.	1.	13.	341.	1020.	106.	0.85	57.	46.	-30.
28121	FCMC	DISTIL	0.	-0.613	0.	0.474	0.35	-553.	1.	0.	-203.	743.	64.	0.47	37.	48.	-12.

HONEYWELL PAGE PRINTING SYSTEM - P1199-03

DATE 06/12/79
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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY
REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

PAGE 29

FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9

ALTERNATIVES STUDY
(SAVINGS ARE POSITIVE)
TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---							
		ECS	DIRECT	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH			
28121	FCMCDS	DISTIL	0.	-0.702	0.	0.543	0.36	-637.	158.	-1.	-237.	838.	72. 0.47	42.	15.	47.	-15.
28191	STM141	RESIDU	0.	-0.099	0.	0.164	0.14	-35.	148.	-5.	42.	261.	-31. 0.23	45.	0.	-9.	-5.
28191	STM141	RESIDU	0.	-0.113	0.	0.187	0.15	-39.	143.	-6.	49.	275.	-30. 0.24	50.	3.	-8.	-4.
28191	STM141	COAL-F	0.	-0.099	0.	0.164	0.14	-35.	-59.	-5.	50.	84.	11. 0.12	9.	0.	25.	5.
28191	STM141	COAL-F	0.	-0.113	0.	0.187	0.15	-39.	-68.	-6.	57.	96.	12. 0.14	17.	3.	17.	6.
28191	STM141	COAL-A	0.	-0.099	0.	0.164	0.14	188.	-59.	-5.	273.	84.	11. 0.31	28.	0.	7.	7.
28191	STM141	COAL-A	0.	-0.113	0.	0.187	0.15	186.	-68.	-6.	283.	96.	12. 0.32	33.	3.	5.	8.
28191	STM088	RESIDU	0.	-0.065	0.	0.108	0.09	-23.	162.	-3.	25.	226.	-33. 0.18	41.	0.	1.	-6.
28191	STM088	COAL-F	0.	-0.065	0.	0.108	0.09	-23.	-39.	-3.	33.	56.	7. 0.08	10.	0.	26.	4.
28191	STM088	COAL-A	0.	-0.065	0.	0.108	0.09	193.	-39.	-3.	249.	56.	7. 0.26	23.	0.	15.	5.
28191	PFBSTM	COAL-P	0.	-0.106	0.	0.157	0.13	218.	-63.	13.	303.	80.	28. 0.35	15.	0.	24.	4.
28191	PFBSTM	COAL-P	0.	-0.243	0.	0.362	0.23	240.	-146.	29.	435.	185.	65. 0.46	46.	32.	17.	8.
28191	TISTMT	RESIDU	0.	-0.102	0.	0.161	0.13	-36.	147.	-5.	41.	259.	-31. 0.23	-13.	0.	47.	-13.
28191	TISTMT	RESIDU	0.	-0.332	0.	0.523	0.29	-116.	55.	-17.	149.	484.	-17. 0.36	-44.	56.	49.	-20.
28191	TISTMT	COAL	0.	-0.102	0.	0.161	0.13	-36.	-61.	-5.	49.	82.	10. 0.12	-53.	0.	84.	-4.
28191	TISTMT	COAL	0.	-0.332	0.	0.523	0.29	-116.	-199.	-17.	159.	268.	34. 0.27	-91.	56.	58.	-8.
28191	TIHRSG	RESIDU	0.	-0.179	0.	0.083	0.07	-63.	116.	-9.	13.	226.	-38. 0.17	-32.	0.	74.	-18.
28191	TIHRSG	RESIDU	0.	-0.402	0.	0.187	0.12	-141.	27.	-20.	39.	309.	-39. 0.21	-70.	31.	75.	-28.
28191	TIHRSG	COAL	0.	-0.179	0.	0.083	0.07	-63.	-108.	-9.	22.	36.	7. 0.05	-71.	0.	107.	-8.
28191	TIHRSG	COAL	0.	-0.402	0.	0.187	0.12	-141.	-241.	-20.	49.	81.	15. 0.10	-119.	31.	88.	-15.
28191	STIRL	DISTIL	0.	-0.154	0.	0.109	0.09	77.	255.	28.	162.	399.	44. 0.51	27.	0.	20.	-18.
28191	STIRL	DISTIL	0.	-0.622	0.	0.437	0.22	-30.	124.	20.	310.	703.	83. 0.57	56.	75.	34.	-28.
28191	STIRL	RESIDU	0.	-0.154	0.	0.109	0.09	-54.	126.	-18.	22.	237.	-46. 0.18	27.	0.	16.	-9.
28191	STIRL	RESIDU	0.	-0.622	0.	0.437	0.22	-218.	-61.	-72.	111.	471.	-72. 0.27	55.	75.	30.	-15.
28191	STIRL	COAL	0.	-0.154	0.	0.109	0.09	-54.	-93.	-8.	31.	51.	8. 0.09	-14.	0.	51.	1.
28191	STIRL	COAL	0.	-0.622	0.	0.437	0.22	-218.	-373.	-31.	123.	206.	32. 0.19	-22.	75.	41.	-3.
28191	HEGT00	COAL-A	0.	-0.218	0.	0.045	0.04	150.	-131.	-11.	235.	13.	5. 0.21	-18.	0.	60.	-2.
28191	HEGT00	COAL-A	0.	-0.788	0.	0.161	0.09	15.	-473.	-39.	320.	46.	17. 0.21	0.	64.	41.	-5.
28191	FCMCCL	COAL	0.	-0.124	0.	0.139	0.12	53.	92.	7.	138.	235.	23. 0.33	-20.	0.	56.	-0.
28191	FCMCCL	COAL	0.	-0.758	0.	0.853	0.33	327.	562.	43.	846.	1443.	138. 1.00	35.	126.	30.	3.
28191	FCSTCL	COAL	0.	-0.119	0.	0.144	0.12	41.	71.	5.	126.	214.	21. 0.31	-18.	0.	54.	-0.
28191	FCSTCL	COAL	0.	-0.942	0.	1.144	0.38	327.	562.	42.	999.	1703.	166. 1.00	58.	171.	28.	5.
28191	IGGTST	COAL	0.	-0.153	0.	0.109	0.09	-54.	-92.	7.	31.	52.	23. 0.09	-14.	0.	50.	0.
28191	IGGTST	COAL	0.	-0.812	0.	0.579	0.25	-284.	-487.	33.	163.	274.	121. 0.25	33.	106.	29.	4.
28191	GTSQAR	RESIDU	-1.098	0.938	-1.098	1.201	0.09	167.	149.	38.	251.	293.	54. 0.51	37.	0.	6.	-8.
28191	GTSQAR	RESIDU	-2.097	0.938	-2.097	2.838	0.26	-196.	-227.	30.	415.	813.	143. 0.51	143.	154.	25.	-15.
28191	GTAC08	RESIDU	0.	-0.122	0.	0.140	0.12	-121.	139.	-14.	-44.	251.	-41. 0.14	39.	0.	7.	-6.
28191	GTAC08	RESIDU	0.	-0.608	0.	0.696	0.31	-599.	-56.	-71.	-191.	611.	-56. 0.17	117.	98.	16.	-4.
28191	GTAC12	RESIDU	0.	-0.125	0.	0.137	0.11	-113.	137.	-14.	-36.	249.	-41. 0.15	38.	0.	0.	-7.
28191	GTAC12	RESIDU	0.	-0.782	0.	0.857	0.33	-703.	-125.	-85.	-189.	720.	-56. 0.19	136.	129.	18.	-4.
28191	GTAC16	RESIDU	0.	-0.132	0.	0.131	0.11	-111.	135.	-13.	-35.	247.	-41. 0.14	38.	0.	2.	-7.
28191	GTAC16	RESIDU	0.	-0.959	0.	0.956	0.33	-810.	-196.	-98.	-208.	794.	-61. 0.19	150.	155.	20.	-6.
28191	GTWC16	RESIDU	0.	-0.140	0.	0.123	0.10	-116.	132.	-14.	-39.	243.	-42. 0.14	38.	0.	3.	-7.
28191	GTWC16	RESIDU	0.	-1.028	0.	0.907	0.32	-851.	-223.	-103.	-243.	776.	-68. 0.17	158.	157.	21.	-8.
28191	CC1626	RESIDU	0.	-0.144	0.	0.119	0.10	-110.	130.	-13.	-33.	241.	-41. 0.14	38.	0.	3.	-8.
28191	CC1626	RESIDU	0.	-1.461	0.	1.202	0.33	-1111.	-397.	-137.	-272.	988.	-75. 0.19	210.	225.	22.	-10.

ORIGINAL PAGE IS
OF POOR QUALITY

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DATE 06/12/79

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GENERAL ELECTRIC COMPANY

PAGE 30

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING S*****- - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		*****DIRECT*****-----TOTAL-----FESR -----DIRECT-----*****TOTAL*****									EMSR	SAVING	TOTAL	COST	LAEC			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED	
															MWH			
28191	CC1622	RESIDU	0.	-0.138	0.	0.125	0.10	-109.	132.	-13.	-32.	244.	-41.	0.14	38.	0.	3.	-7
28191	CC1622	RESIDU	0.	-1.253	0.	1.132	0.34	-986.	-314.	-121.	-235.	925.	-67.	0.20	182.	199.	22.	-9
28191	CC1222	RESIDU	0.	-0.137	0.	0.126	0.10	-108.	133.	-13.	-32.	244.	-41.	0.15	39.	0.	2.	-7
28191	CC1222	RESIDU	0.	-1.231	0.	1.134	0.34	-973.	-305.	-119.	-229.	924.	-66.	0.20	186.	197.	21.	-8
28191	CC0822	RESIDU	0.	-0.127	0.	0.135	0.11	-110.	137.	-13.	-33.	248.	-40.	0.15	39.	0.	0.	-7
28191	CC0822	RESIDU	0.	-0.895	0.	0.950	0.34	-772.	-171.	-93.	-192.	784.	-57.	0.20	157.	148.	18.	-4
28191	DEHTPM	RESIDU	0.	-0.154	0.	0.109	0.09	-241.	126.	-16.	-165.	237.	-44.	0.02	21.	0.	22.	-10
28191	DEHTPM	RESIDU	0.	-0.908	0.	0.643	0.26	-1425.	-176.	-94.	-940.	618.	-76.	0.17	32.	121.	38.	-24
28191	GTSOAD	DISTIL	-1.072	0.938	-1.072	1.201	0.11	251.	389.	47.	328.	500.	20.	0.72	40.	0.	4.	-16
28191	GTSOAD	DISTIL	-1.759	0.938	-1.759	2.543	0.31	-24.	277.	47.	480.	1102.	72.	0.68	141.	126.	22.	-20
28191	GTRA08	DISTIL	0.	-0.161	0.	0.102	0.09	36.	254.	28.	120.	397.	44.	0.47	33.	0.	15.	-18
28191	GTRA08	DISTIL	0.	-2.009	0.	1.279	0.30	-850.	-267.	-3.	207.	1531.	191.	0.48	222.	284.	32.	-46
28191	GTRA12	DISTIL	0.	-0.154	0.	0.108	0.09	37.	255.	28.	122.	399.	44.	0.48	36.	0.	11.	-17
28191	GTRA12	DISTIL	0.	-1.795	0.	1.263	0.32	-765.	-207.	0.	219.	1466.	181.	0.49	210.	262.	31.	-41
28191	GTRA16	DISTIL	0.	-0.151	0.	0.111	0.09	37.	256.	28.	121.	400.	44.	0.48	35.	0.	11.	-17
28191	GTRA16	DISTIL	0.	-1.586	0.	1.167	0.32	-681.	-148.	4.	204.	1358.	167.	0.50	185.	234.	31.	-37
28191	GTR208	DISTIL	0.	-0.149	0.	0.114	0.09	34.	257.	28.	118.	401.	44.	0.48	37.	0.	9.	-17
28191	GTR208	DISTIL	0.	-1.226	0.	0.938	0.30	-537.	-46.	10.	159.	1137.	138.	0.49	161.	178.	28.	-30
28191	GTR212	DISTIL	0.	-0.149	0.	0.114	0.09	35.	257.	28.	120.	401.	44.	0.48	37.	0.	9.	-17
28191	GTR212	DISTIL	0.	-1.317	0.	1.009	0.31	-574.	-72.	9.	174.	1200.	146.	0.49	168.	193.	29.	-32
28191	GTR216	DISTIL	0.	-0.147	0.	0.116	0.10	36.	257.	28.	121.	401.	44.	0.48	36.	0.	10.	-17
28191	GTR216	DISTIL	0.	-1.341	0.	1.059	0.32	-583.	-79.	8.	189.	1234.	150.	0.50	167.	200.	29.	-32
28191	GTRW08	DISTIL	0.	-0.175	0.	0.088	0.07	32.	250.	28.	116.	393.	44.	0.47	33.	0.	17.	-18
28191	GTRW08	DISTIL	0.	-2.540	0.	1.275	0.27	-1063.	-416.	-12.	164.	1670.	214.	0.46	275.	333.	33.	-58
28191	GTRW12	DISTIL	0.	-0.165	0.	0.098	0.08	35.	252.	28.	120.	396.	44.	0.47	33.	0.	15.	-18
28191	GTRW12	DISTIL	0.	-2.326	0.	1.387	0.30	-977.	-356.	-9.	217.	1674.	211.	0.48	268.	324.	32.	-50
28191	GTRW16	DISTIL	0.	-0.161	0.	0.102	0.08	36.	253.	28.	120.	397.	44.	0.47	33.	0.	15.	-18
28191	GTRW16	DISTIL	0.	-2.025	0.	1.281	0.30	-857.	-271.	-3.	207.	1536.	192.	0.48	235.	285.	31.	-45
28191	GTR308	DISTIL	0.	-0.183	0.	0.080	0.07	24.	247.	28.	109.	351.	43.	0.46	37.	0.	14.	-18
28191	GTR308	DISTIL	0.	-1.946	0.	0.848	0.23	-825.	-249.	-2.	74.	1279.	163.	0.43	209.	237.	34.	-50
28191	GTR312	DISTIL	0.	-0.155	0.	0.108	0.09	35.	255.	28.	120.	399.	44.	0.48	37.	0.	10.	-17
28191	GTR312	DISTIL	0.	-1.596	0.	1.112	0.31	-685.	-151.	4.	186.	1331.	164.	0.49	209.	229.	29.	-35
28191	GTR316	DISTIL	0.	-0.155	0.	0.107	0.09	35.	255.	28.	119.	399.	44.	0.48	37.	0.	10.	-17
28191	GTR316	DISTIL	0.	-1.572	0.	1.087	0.30	-676.	-144.	4.	180.	1311.	162.	0.49	202.	225.	29.	-35
28191	FCPADS	DISTIL	0.	-0.177	0.	0.086	0.07	80.	311.	32.	164.	455.	47.	0.56	25.	0.	35.	-22
28191	FCPADS	DISTIL	0.	-3.752	0.	1.817	0.28	-586.	563.	47.	1206.	3609.	377.	0.85	230.	498.	52.	-139
28191	FCMCDS	DISTIL	0.	-0.148	0.	0.115	0.10	-29.	314.	29.	56.	458.	44.	0.47	24.	0.	31.	-21
28191	FCMCDS	DISTIL	0.	-2.484	0.	1.922	0.36	-2255.	558.	-4.	-838.	2967.	256.	0.47	158.	389.	48.	-107
28192	STM141	RESIDU	0.	-0.198	0.	0.328	0.14	-69.	296.	-10.	84.	521.	-62.	0.23	98.	0.	-13.	-9
28192	STM141	RESIDU	0.	-0.226	0.	0.374	0.15	-79.	285.	-11.	98.	550.	-60.	0.24	106.	7.	-11.	-8
28192	STM141	COAL-F	0.	-0.198	0.	0.328	0.14	-69.	-119.	-10.	100.	169.	21.	0.12	33.	0.	17.	12
28192	STM141	COAL-F	0.	-0.226	0.	0.374	0.15	-79.	-135.	-11.	114.	192.	24.	0.14	37.	7.	16.	13
28192	STM141	COAL-A	0.	-0.198	0.	0.328	0.14	377.	-119.	-10.	546.	169.	21.	0.31	63.	0.	4.	15
28192	STM141	COAL-A	0.	-0.226	0.	0.374	0.15	373.	-135.	-11.	566.	192.	24.	0.32	73.	7.	2.	17
28192	STM088	RESIDU	0.	-0.130	0.	0.216	0.09	-46.	325.	-7.	51.	452.	-66.	0.18	88.	0.	-14.	-12
28192	STM088	COAL-F	0.	-0.130	0.	0.216	0.09	-46.	-76.	-7.	66.	111.	14.	0.08	22.	0.	25.	8

HONEYWELL PAGE PRINTING SYSTEM - DIST-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 31

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

TYPE MATCH=HEAT

COST = \$*10**9

PROCS	ECS	*****FUEL SAVING S***** - - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER--						
		ECS *****DIRECT*****		-----TOTAL-----		FESR		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX						PART	
EXPORT MWH																		SAVED
28192	SYM088	COAL-A	0.	-0.130	0.	0.216	0.09	386.	-78.	-7.	497.	111.	14.	0.26	53.	0.	12.	12.
28192	PFBSTM	COAL-P	0.	-0.211	0.	0.314	0.13	437.	-127.	25.	606.	161.	56.	0.35	43.	0.	16.	11.
28192	PFBSTM	COAL-P	0.	-0.487	0.	0.725	0.23	480.	-292.	56.	870.	371.	130.	0.45	105.	64.	14.	18.
28192	TISTMT	RESIDU	0.	-0.204	0.	0.321	0.13	-71.	294.	-10.	82.	519.	-62.	0.23	-0.	0.	34.	-22.
28192	TISTMT	RESIDU	0.	-0.665	0.	1.046	0.29	-233.	109.	-33.	299.	969.	-34.	0.36	-86.	111.	48.	-39.
28192	TISTMT	COAL	0.	-0.204	0.	0.321	0.13	-71.	-123.	-10.	98.	165.	21.	0.12	-68.	0.	65.	-2.
28192	TISTMT	COAL	0.	-0.665	0.	1.046	0.29	-233.	-399.	-33.	318.	537.	68.	0.27	-160.	111.	58.	-5.
28192	TIHRSG	RESIDU	0.	-0.359	0.	0.167	0.07	-125.	232.	-18.	27.	452.	-76.	0.17	-35.	0.	61.	-32.
28192	TIHRSG	RESIDU	0.	-0.804	0.	0.375	0.12	-282.	54.	-40.	78.	618.	-78.	0.21	-140.	61.	75.	-55.
28192	TIHRSG	COAL	0.	-0.359	0.	0.167	0.07	-125.	-215.	-18.	44.	72.	13.	0.05	-104.	0.	88.	-10.
28192	TIHRSG	COAL	0.	-0.804	0.	0.375	0.12	-282.	-483.	-40.	98.	162.	30.	0.10	-238.	61.	88.	-31.
28192	STIRL	DISTIL	0.	-0.309	0.	0.217	0.09	154.	511.	57.	323.	798.	88.	0.51	59.	0.	17.	-36.
28192	STIRL	DISTIL	0.	-1.244	0.	0.875	0.22	-61.	248.	41.	621.	1406.	165.	0.57	114.	149.	34.	-55.
28192	STIRL	RESIDU	0.	-0.309	0.	0.217	0.09	-108.	252.	-36.	45.	474.	-92.	0.18	59.	0.	13.	-18.
28192	STIRL	RESIDU	0.	-1.244	0.	0.875	0.22	-435.	-122.	-145.	223.	943.	-144.	0.27	114.	149.	29.	-29.
28192	STIRL	COAL	0.	-0.309	0.	0.217	0.09	-108.	-185.	-15.	61.	102.	16.	0.08	-17.	0.	45.	3.
28192	STIRL	COAL	0.	-1.244	0.	0.875	0.22	-435.	-746.	-62.	246.	412.	63.	0.19	-39.	149.	40.	-4.
28192	HEGT00	COAL-A	0.	-0.436	0.	0.089	0.04	300.	-262.	-22.	469.	26.	9.	0.21	-9.	0.	46.	1.
28192	HEGT00	COAL-A	0.	-1.576	0.	0.323	0.09	30.	-946.	-79.	641.	93.	34.	0.21	51.	129.	35.	-4.
28192	FCMCCL	COAL	0.	-0.247	0.	0.278	0.12	107.	183.	14.	276.	471.	45.	0.33	-14.	0.	43.	3.
28192	FCMCCL	COAL	0.	-1.517	0.	1.707	0.33	655.	1125.	85.	1693.	2888.	276.	1.00	125.	253.	26.	13.
28192	FCSTCL	COAL	0.	-0.237	0.	0.288	0.12	82.	142.	11.	252.	429.	42.	0.31	-12.	0.	42.	4.
28192	FCSTCL	COAL	0.	-1.886	0.	2.290	0.38	655.	1124.	84.	1998.	3408.	332.	1.00	177.	342.	24.	19.
28192	IGGTST	COAL	0.	-0.307	0.	0.219	0.09	-107.	-184.	14.	62.	103.	46.	0.09	-2.	0.	37.	5.
28192	IGGTST	COAL	0.	-1.625	0.	1.159	0.25	-569.	-975.	76.	327.	548.	241.	0.25	88.	212.	27.	11.
28192	GTS0AR	RESIDU	-2.197	1.877	-2.197	2.403	0.09	334.	299.	76.	503.	586.	107.	0.51	80.	0.	3.	-16.
28192	GTS0AR	RESIDU	-4.196	1.877	-4.196	5.679	0.26	-392.	-453.	60.	831.	1626.	285.	0.51	304.	307.	24.	-27.
28192	GTAC08	RESIDU	0.	-0.245	0.	0.281	0.12	-241.	277.	-29.	-88.	501.	-83.	0.14	83.	0.	-3.	-12.
28192	GTAC08	RESIDU	0.	-1.217	0.	1.394	0.31	-1199.	-111.	-143.	-383.	1224.	-112.	0.17	242.	196.	15.	-7.
28192	GTAC12	RESIDU	0.	-0.251	0.	0.275	0.11	-226.	275.	-27.	-72.	499.	-81.	0.15	81.	0.	-2.	-13.
28192	GTAC12	RESIDU	0.	-1.564	0.	1.716	0.33	-1408.	-250.	-169.	-378.	1440.	-113.	0.19	280.	258.	18.	-8.
28192	GTAC16	RESIDU	0.	-0.263	0.	0.262	0.11	-222.	270.	-27.	-69.	493.	-81.	0.14	80.	0.	-0.	-13.
28192	GTAC16	RESIDU	0.	-1.920	0.	1.913	0.33	-1621.	-392.	-197.	-417.	1590.	-122.	0.19	304.	310.	20.	-12.
28192	GTWC16	RESIDU	0.	-0.279	0.	0.246	0.10	-231.	264.	-28.	-78.	486.	-83.	0.14	81.	0.	0.	-14.
28192	GTWC16	RESIDU	0.	-2.056	0.	1.816	0.32	-1703.	-447.	-207.	-487.	1552.	-135.	0.17	327.	314.	20.	-14.
28192	CC1626	RESIDU	0.	-0.288	0.	0.237	0.10	-219.	260.	-27.	-66.	483.	-82.	0.14	81.	0.	1.	-14.
28192	CC1626	RESIDU	0.	-2.923	0.	2.406	0.33	-2223.	-794.	-277.	-545.	1977.	-150.	0.19	435.	451.	21.	-18.
28192	CC1622	RESIDU	0.	-0.276	0.	0.249	0.10	-217.	265.	-27.	-64.	488.	-82.	0.14	80.	0.	0.	-14.
28192	CC1622	RESIDU	0.	-2.507	0.	2.266	0.34	-1974.	-628.	-242.	-471.	1851.	-134.	0.20	380.	398.	21.	-15.
28192	CC1222	RESIDU	0.	-0.274	0.	0.252	0.10	-216.	266.	-26.	-63.	489.	-81.	0.15	82.	0.	-0.	-14.
28192	CC1222	RESIDU	0.	-2.464	0.	2.269	0.34	-1948.	-610.	-238.	-458.	1848.	-132.	0.20	389.	395.	20.	-13.
28192	CC0822	RESIDU	0.	-0.255	0.	0.271	0.11	-220.	273.	-27.	-67.	497.	-81.	0.15	83.	0.	-2.	-13.
28192	CC0622	RESIDU	0.	-1.792	0.	1.901	0.34	-1544.	-341.	-187.	-384.	1568.	-115.	0.20	322.	297.	18.	-7.
28192	DEHTPM	RESIDU	0.	-0.308	0.	0.218	0.09	-483.	252.	-32.	-330.	474.	-88.	0.02	43.	0.	20.	-20.
28192	DEHTPM	RESIDU	0.	-1.817	0.	1.288	0.26	-2852.	-351.	-189.	-1881.	1236.	-153.	-0.17	68.	242.	38.	-47.
28192	GTS0AD	DISTIL	-2.146	1.877	-2.146	2.403	0.11	503.	778.	94.	656.	1001.	39.	0.72	84.	0.	2.	-31.

HONEYWELL PAGE PRINTING SYSTEM - P1102-03

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 32

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST

=\$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S***** - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
28192	GTSOAD	DISTIL	-3.520	1.877	-3.520	5.089	0.31	-47.	554.	94.	960.	2205.	143.	0.68	287.	252.	22.	-40.
28192	GTRA08	DISTIL	0.	-0.321	0.	0.204	0.09	71.	507.	56.	240.	795.	88.	0.47	75.	0.	11.	-34.
28192	GTRA08	DISTIL	0.	-4.020	0.	2.559	0.30	-1702.	-534.	-6.	415.	3064.	383.	0.48	468.	568.	31.	-90.
28192	GTRA12	DISTIL	0.	-0.309	0.	0.217	0.09	74.	511.	57.	243.	798.	88.	0.48	77.	0.	8.	-33.
28192	GTRA12	DISTIL	0.	-3.592	0.	2.527	0.32	-1531.	-413.	1.	438.	2933.	363.	0.49	441.	525.	30.	-79.
28192	GTRA16	DISTIL	0.	-0.303	0.	0.223	0.09	74.	513.	57.	243.	800.	88.	0.48	76.	0.	8.	-33.
28192	GTRA16	DISTIL	0.	-3.174	0.	2.335	0.32	-1364.	-296.	8.	409.	2717.	334.	0.50	394.	467.	29.	-72.
28192	GTR208	DISTIL	0.	-0.298	0.	0.228	0.09	67.	514.	57.	236.	801.	88.	0.48	80.	0.	6.	-33.
28192	GTR208	DISTIL	0.	-2.454	0.	1.877	0.30	-1075.	-93.	20.	318.	2276.	277.	0.49	340.	357.	27.	-58.
28192	GTR212	DISTIL	0.	-0.298	0.	0.228	0.09	70.	514.	57.	239.	801.	88.	0.48	79.	0.	7.	-33.
28192	GTR212	DISTIL	0.	-2.636	0.	2.018	0.31	-1148.	-144.	17.	349.	2401.	293.	0.49	359.	387.	28.	-61.
28192	GTR216	DISTIL	0.	-0.294	0.	0.232	0.10	73.	515.	57.	242.	803.	88.	0.48	77.	0.	7.	-33.
28192	GTR216	DISTIL	0.	-2.683	0.	2.119	0.32	-1167.	-157.	16.	378.	2469.	301.	0.50	357.	401.	28.	-61.
28192	GTRW08	DISTIL	0.	-0.350	0.	0.176	0.07	63.	499.	56.	232.	787.	87.	0.47	75.	0.	13.	-35.
28192	GTRW08	DISTIL	0.	-5.082	0.	2.551	0.27	-2127.	-833.	-24.	329.	3342.	427.	0.46	572.	667.	32.	-113.
28192	GTRW12	DISTIL	0.	-0.329	0.	0.196	0.08	71.	505.	56.	240.	793.	87.	0.47	75.	0.	11.	-35.
28192	GTRW12	DISTIL	0.	-4.654	0.	2.775	0.30	-1955.	-712.	-17.	435.	3351.	423.	0.48	567.	647.	30.	-97.
28192	GTRW16	DISTIL	0.	-0.322	0.	0.204	0.08	71.	507.	56.	240.	795.	88.	0.47	75.	0.	11.	-34.
28192	GTRW16	DISTIL	0.	-4.051	0.	2.562	0.30	-1714.	-543.	-7.	413.	3074.	385.	0.48	500.	571.	30.	-87.
28192	GTR308	DISTIL	0.	-0.366	0.	0.160	0.07	49.	495.	56.	218.	782.	87.	0.46	80.	0.	12.	-36.
28192	GTR308	DISTIL	0.	-3.893	0.	1.697	0.23	-1651.	-498.	-4.	147.	2559.	327.	0.43	445.	475.	33.	-96.
28192	GTR312	DISTIL	0.	-0.310	0.	0.216	0.09	70.	511.	57.	239.	798.	88.	0.48	80.	0.	7.	-33.
28192	GTR312	DISTIL	0.	-3.194	0.	2.226	0.31	-1372.	-301.	8.	372.	2663.	328.	0.49	437.	459.	28.	-68.
28192	GTR316	DISTIL	0.	-0.311	0.	0.215	0.09	69.	510.	57.	239.	798.	88.	0.48	79.	0.	8.	-33.
28192	GTR316	DISTIL	0.	-3.146	0.	2.175	0.30	-1352.	-288.	8.	360.	2622.	323.	0.49	423.	450.	28.	-69.
28192	FCPADS	DISTIL	0.	-0.354	0.	0.171	0.07	159.	623.	63.	328.	910.	95.	0.56	56.	0.	33.	-43.
28192	FCPADS	DISTIL	0.	-7.508	0.	3.537	0.28	-1173.	1126.	94.	2412.	7221.	754.	0.85	479.	996.	52.	-315.
28192	FCMCDS	DISTIL	0.	-0.296	0.	0.229	0.10	-57.	629.	58.	112.	916.	89.	0.47	54.	0.	28.	-41.
28192	FCMCDS	DISTIL	0.	-4.970	0.	3.846	0.36	-4513.	1116.	-9.	-1677.	5938.	513.	0.47	345.	778.	47.	-211.
28212	STM141	RESIDU	0.	-0.013	0.	0.022	0.09	-5.	35.	-1.	5.	48.	-7.	0.20	10.	0.	-34.	-1.
28212	STM141	RESIDU	0.	-0.035	0.	0.059	0.20	-12.	26.	-2.	16.	70.	-6.	0.28	15.	5.	-6.	-1.
28212	STM141	COAL-F	0.	-0.013	0.	0.022	0.09	-5.	-8.	-1.	7.	11.	1.	0.08	-2.	0.	59.	-0.
28212	STM141	COAL-F	0.	-0.035	0.	0.059	0.20	-12.	-21.	-2.	18.	30.	4.	0.18	4.	5.	20.	1.
28212	STM141	COAL-A	0.	-0.013	0.	0.022	0.09	42.	-8.	-1.	53.	11.	1.	0.28	-0.	0.	44.	0.
28212	STM141	COAL-A	0.	-0.035	0.	0.059	0.20	39.	-21.	-2.	69.	30.	4.	0.36	10.	5.	6.	2.
28212	STM088	RESIDU	0.	-0.013	0.	0.022	0.09	-5.	35.	-1.	5.	48.	-7.	0.20	10.	0.	-36.	-1.
28212	STM088	RESIDU	0.	-0.024	0.	0.040	0.15	-9.	31.	-1.	11.	59.	-6.	0.24	13.	3.	-19.	-1.
28212	STM088	COAL-F	0.	-0.013	0.	0.022	0.09	-5.	-8.	-1.	7.	11.	1.	0.08	-2.	0.	57.	-0.
28212	STM088	COAL-F	0.	-0.024	0.	0.040	0.15	-9.	-15.	-1.	12.	21.	3.	0.14	3.	3.	19.	1.
28212	STM088	COAL-A	0.	-0.013	0.	0.022	0.09	42.	-8.	-1.	53.	11.	1.	0.28	0.	0.	39.	0.
28212	STM088	COAL-A	0.	-0.024	0.	0.040	0.15	40.	-15.	-1.	61.	21.	3.	0.32	8.	3.	2.	2.
28212	PFBSTM	COAL-P	0.	-0.014	0.	0.021	0.09	45.	-8.	1.	56.	11.	3.	0.30	-3.	0.	62.	-0.
28212	PFBSTM	COAL-P	0.	-0.064	0.	0.098	0.27	51.	-38.	6.	103.	50.	16.	0.48	6.	12.	25.	1.
28212	TISTMT	RESIDU	0.	-0.014	0.	0.022	0.09	-5.	35.	-1.	5.	48.	-7.	0.19	-0.	0.	36.	-3.
28212	TISTMT	RESIDU	0.	-0.085	0.	0.135	0.32	-30.	6.	-4.	39.	118.	-3.	0.38	-22.	17.	60.	-6.
28212	TISTMT	AL	0.	-0.014	0.	0.022	0.09	-5.	-8.	-1.	7.	11.	1.	0.08	-13.	0.	132.	-2.

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

PAGE 33

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****				*****EMISSIONS SAVING S*****				CAPITL--ELECTRIC POWER---							
		ECS ****DIRECT*****		TOTAL-----FESR-----		DIRECT-----		*****TOTAL*****		EMSR SAVING		TOTAL COST LAEC					
		FUEL OIL+GAS	COAL OIL+GAS	COAL	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED				
28212	TIHRSO	COAL	0.	-0.085	0.	0.135	0.32	-30.	-51.	-4.	41.	69.	9. 0.29	-38.	17.	74.	-4
28212	TIHRSO	RESIDU	0.	-0.021	0.	0.014	0.06	-7.	32.	-1.	2.	45.	-8. 0.17	-6.	0.	83.	-4
28212	TIHRSO	RESIDU	0.	-0.073	0.	0.048	0.15	-25.	11.	-4.	11.	69.	-7. 0.23	-26.	8.	95.	-7
28212	TIHRSO	COAL	0.	-0.021	0.	0.014	0.06	-7.	-13.	-1.	4.	7.	1. 0.05	-20.	0.	185.	-3
28212	TIHRSO	COAL	0.	-0.073	0.	0.048	0.15	-25.	-44.	-4.	13.	23.	4. 0.13	-41.	8.	121.	-5
28212	STIRL	DISTIL	0.	-0.020	0.	0.015	0.06	20.	59.	6.	31.	78.	8. 0.50	9.	0.	-20.	-3
28212	STIRL	DISTIL	0.	-0.148	0.	0.112	0.24	-10.	23.	4.	74.	165.	20. 0.58	17.	21.	30.	-6
28212	STIRL	RESIDU	0.	-0.020	0.	0.015	0.06	-7.	32.	-2.	3.	45.	-9. 0.16	9.	0.	-25.	-2
28212	STIRL	RESIDU	0.	-0.148	0.	0.112	0.24	-52.	-19.	-17.	29.	113.	-15. 0.29	17.	21.	25.	-3
28212	STIRL	COAL	0.	-0.020	0.	0.015	0.06	-7.	-12.	-1.	4.	7.	1. 0.05	-2.	0.	59.	-0
28212	STIRL	COAL	0.	-0.148	0.	0.112	0.24	-52.	-89.	-7.	32.	54.	8. 0.21	-1.	21.	36.	-0
28212	HEGT60	COAL-A	0.	-0.032	0.	0.004	0.02	37.	-19.	-2.	49.	0.	1. 0.21	-8.	0.	104.	-1
28212	HEGT60	COAL-A	0.	-0.537	0.	0.061	0.08	-63.	-322.	-27.	129.	5.	9. 0.19	-28.	53.	54.	-9
28212	HEGT00	COAL-A	0.	-0.028	0.	0.007	0.03	37.	-17.	-1.	48.	2.	1. 0.22	-7.	0.	97.	-1
28212	HEGT00	COAL-A	0.	-0.159	0.	0.040	0.10	5.	-95.	-8.	69.	13.	4. 0.22	-13.	15.	56.	-3
28212	FCMCCL	COAL	0.	-0.017	0.	0.019	0.08	7.	12.	1.	19.	32.	3. 0.23	-8.	0.	96.	-1
28212	FCMCCL	COAL	0.	-0.162	0.	0.184	0.34	71.	121.	9.	182.	310.	30. 1.00	-7.	29.	40.	-2
28212	FCSTCL	COAL	0.	-0.016	0.	0.020	0.08	5.	9.	1.	16.	28.	3. 0.20	-7.	0.	93.	-1
28212	FCSTCL	COAL	0.	-0.222	0.	0.274	0.39	71.	121.	9.	230.	393.	38. 1.00	-3.	43.	36.	-1
28212	IGGTST	COAL	0.	-0.020	0.	0.015	0.06	-7.	-12.	1.	4.	7.	3. 0.06	-7.	0.	94.	-1
28212	IGGTST	COAL	0.	-0.193	0.	0.147	0.27	-68.	-116.	8.	42.	70.	28. 0.27	-4.	29.	37.	-1
28212	GTSDAR	RESIDU	-0.223	0.202	-0.223	0.238	0.06	41.	37.	8.	52.	57.	10. 0.51	9.	0.	-28.	-2
28212	GTSDAR	RESIDU	-0.423	0.202	-0.423	0.585	0.28	-35.	-38.	7.	88.	172.	29. 0.52	31.	33.	22.	-3
28212	GTAC08	RESIDU	0.	-0.016	0.	0.019	0.08	-16.	34.	-2.	-7.	47.	-9. 0.13	10.	0.	-36.	-1
28212	GTAC08	RESIDU	0.	-0.131	0.	0.150	0.31	-129.	-12.	-15.	-41.	132.	-12. 0.17	26.	23.	14.	-1
28212	GTAC12	RESIDU	0.	-0.017	0.	0.018	0.08	-15.	34.	-2.	-5.	46.	-8. 0.14	10.	0.	-36.	-1
28212	GTAC12	RESIDU	0.	-0.169	0.	0.185	0.33	-152.	-27.	-18.	-41.	155.	-12. 0.19	30.	30.	17.	-1
28212	GTAC16	RESIDU	0.	-0.017	0.	0.018	0.08	-15.	33.	-2.	-5.	46.	-8. 0.14	10.	0.	-34.	-1
28212	GTAC16	RESIDU	0.	-0.201	0.	0.206	0.34	-171.	-40.	-21.	-43.	170.	-13. 0.20	32.	35.	19.	-1
28212	GTWC16	RESIDU	0.	-0.019	0.	0.017	0.07	-16.	33.	-2.	-6.	46.	-9. 0.13	9.	0.	-31.	-1
28212	GTWC16	RESIDU	0.	-0.222	0.	0.196	0.32	-184.	-48.	-22.	-53.	167.	-15. 0.17	34.	36.	20.	-2
28212	CC1626	RESIDU	0.	-0.019	0.	0.016	0.07	-14.	33.	-2.	-5.	45.	-9. 0.14	10.	0.	-30.	-2
28212	CC1626	RESIDU	0.	-0.340	0.	0.286	0.35	-255.	-96.	-31.	-57.	232.	-16. 0.20	47.	56.	23.	-3
28212	CC1622	RESIDU	0.	-0.018	0.	0.017	0.07	-14.	33.	-2.	-4.	46.	-8. 0.14	10.	0.	-32.	-1
28212	CC1622	RESIDU	0.	-0.293	0.	0.272	0.35	-226.	-77.	-28.	-48.	217.	-14. 0.21	42.	50.	22.	-2
28212	CC1222	RESIDU	0.	-0.018	0.	0.017	0.07	-14.	33.	-2.	-4.	46.	-8. 0.14	10.	0.	-33.	-1
28212	CC1222	RESIDU	0.	-0.288	0.	0.273	0.36	-223.	-75.	-27.	-47.	217.	-14. 0.22	43.	49.	21.	-2
28212	CC0822	RESIDU	0.	-0.017	0.	0.018	0.08	-14.	34.	-2.	-4.	46.	-8. 0.14	10.	0.	-33.	-1
28212	CC0822	RESIDU	0.	-0.212	0.	0.231	0.36	-178.	-44.	-22.	-38.	186.	-12. 0.22	36.	38.	19.	-1
28212	STIG15	RESIDU	0.	-0.029	0.	0.006	0.03	-18.	29.	-1.	-8.	41.	-8. 0.11	10.	0.	-21.	-2
28212	STIG15	RESIDU	0.	-13.514	0.	2.721	0.17	-7859.	-5165.	-386.	-2896.	3044.	17. 0.01	996.	1472.	37.	-206
28212	STIG10	RESIDU	0.	-0.027	0.	0.009	0.04	-17.	30.	-1.	-8.	42.	-8. 0.11	10.	0.	-28.	-2
28212	STIG10	RESIDU	0.	-1.095	0.	0.361	0.22	-707.	-397.	-29.	-249.	360.	5. 0.07	99.	133.	32.	-16
28212	STIG15	RESIDU	0.	-0.025	0.	0.010	0.04	-17.	30.	-1.	-8.	43.	-8. 0.12	10.	0.	-27.	-2
28212	STIG15	RESIDU	0.	-0.613	0.	0.241	0.23	-418.	-205.	-14.	-150.	238.	4. 0.09	64.	77.	29.	-9
28212	DEADV3	RESIDU	0.	-0.024	0.	0.011	0.05	-27.	31.	-2.	-17.	43.	-9. 0.07	7.	0.	-8.	-2

HONEYWELL PAGE PRINTING SYSTEM- RISE-03

DATE 06/12/79
ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 34

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9
REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****						-----EMISSIONS SAVING S-----						CAPITL--ELECTRIC POWER---				
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED	
															MWH			
28212	DEADV3	RESIDU	0.	-0.746	0.	0.353	0.27	-830.	-258.	-62.	-483.	315.	-35.	-0.17	33.	100.	39.	-14.
28212	DEHTPM	RESIDU	0.	-0.019	0.	0.017	0.07	-29.	33.	-2.	-19.	46.	-9.	0.08	7.	0.	-10.	-2.
28212	DEHTPM	RESIDU	0.	-0.199	0.	0.182	0.31	-311.	-29.	-21.	-191.	157.	-14.	-0.09	14.	32.	31.	-4.
28212	DESOA3	DISTIL	-0.228	0.202	-0.228	0.238	0.04	6.	84.	10.	16.	97.	3.	0.49	8.	0.	-7.	-4.
28212	DESOA3	DISTIL	-1.166	0.202	-1.166	1.518	0.23	-2145.	-68.	10.	-1731.	616.	41.	-0.75	14.	120.	51.	-32.
28212	DESOA3	RESIDU	-0.228	0.202	-0.228	0.238	0.04	-78.	35.	8.	-67.	55.	10.	-0.01	8.	0.	-13.	-2.
28212	DESOA3	RESIDU	-1.166	0.202	-1.166	1.518	0.23	-4653.	-318.	1.	-4230.	402.	79.	-2.63	14.	120.	45.	-23.
28212	GTSDAD	DISTIL	-0.220	0.202	-0.220	0.238	0.07	58.	86.	10.	68.	98.	3.	0.72	10.	0.	-32.	-3.
28212	GTSDAD	DISTIL	-0.377	0.202	-0.377	0.546	0.31	-5.	60.	10.	103.	237.	15.	0.68	31.	29.	21.	-4.
28212	GTRA08	DISTIL	0.	-0.020	0.	0.015	0.06	14.	59.	6.	26.	78.	8.	0.48	9.	0.	-24.	-3.
28212	GTRA08	DISTIL	0.	-0.351	0.	0.266	0.32	-151.	-35.	1.	48.	303.	37.	0.50	42.	55.	29.	-8.
28212	GTRA12	DISTIL	0.	-0.020	0.	0.016	0.07	14.	59.	6.	26.	78.	8.	0.48	9.	0.	-25.	-3.
28212	GTRA12	DISTIL	0.	-0.327	0.	0.265	0.33	-141.	-28.	1.	50.	296.	36.	0.51	42.	52.	28.	-7.
28212	GTRA16	DISTIL	0.	-0.019	0.	0.016	0.07	14.	59.	6.	26.	78.	8.	0.48	9.	0.	-24.	-3.
28212	GTRA16	DISTIL	0.	-0.298	0.	0.247	0.33	-129.	-19.	2.	46.	279.	34.	0.51	37.	48.	28.	-7.
28212	GTR208	DISTIL	0.	-0.019	0.	0.016	0.07	14.	59.	6.	25.	78.	8.	0.48	9.	0.	-26.	-3.
28212	GTR208	DISTIL	0.	-0.241	0.	0.202	0.31	-106.	-3.	3.	36.	239.	29.	0.50	35.	38.	26.	-6.
28212	GTR212	DISTIL	0.	-0.019	0.	0.016	0.07	14.	59.	6.	25.	78.	8.	0.48	9.	0.	-26.	-3.
28212	GTR212	DISTIL	0.	-0.258	0.	0.217	0.32	-113.	-8.	2.	39.	251.	30.	0.50	36.	41.	26.	-6.
28212	GTR216	DISTIL	0.	-0.019	0.	0.016	0.07	14.	59.	6.	26.	78.	8.	0.48	9.	0.	-25.	-3.
28212	GTR216	DISTIL	0.	-0.261	0.	0.227	0.33	-115.	-9.	2.	42.	258.	31.	0.51	35.	42.	27.	-6.
28212	GTRW08	DISTIL	0.	-0.022	0.	0.013	0.06	14.	58.	6.	25.	77.	8.	0.47	9.	0.	-20.	-3.
28212	GTRW08	DISTIL	0.	-0.463	0.	0.267	0.29	-195.	-66.	-1.	39.	333.	42.	0.47	52.	65.	31.	-11.
28212	GTRW12	DISTIL	0.	-0.021	0.	0.014	0.06	14.	58.	6.	25.	78.	8.	0.47	9.	0.	-22.	-3.
28212	GTRW12	DISTIL	0.	-0.439	0.	0.290	0.31	-186.	-59.	-1.	49.	340.	42.	0.49	52.	65.	30.	-10.
28212	GTRW16	DISTIL	0.	-0.021	0.	0.014	0.06	14.	58.	6.	25.	78.	8.	0.48	9.	0.	-21.	-3.
28212	GTRW16	DISTIL	0.	-0.395	0.	0.271	0.31	-168.	-47.	-0.	46.	317.	39.	0.49	47.	59.	30.	-9.
28212	GTR308	DISTIL	0.	-0.024	0.	0.012	0.05	13.	58.	6.	24.	77.	8.	0.47	9.	0.	-21.	-3.
28212	GTR308	DISTIL	0.	-0.368	0.	0.184	0.24	-157.	-39.	0.	20.	263.	33.	0.44	42.	48.	32.	-9.
28212	GTR312	DISTIL	0.	-0.020	0.	0.015	0.06	14.	59.	6.	25.	78.	8.	0.48	9.	0.	-24.	-3.
28212	GTR312	DISTIL	0.	-0.328	0.	0.239	0.31	-141.	-28.	1.	41.	282.	35.	0.49	43.	50.	28.	-7.
28212	GTR316	DISTIL	0.	-0.021	0.	0.015	0.06	14.	59.	6.	25.	78.	8.	0.47	9.	0.	-23.	-3.
28212	GTR316	DISTIL	0.	-0.324	0.	0.233	0.31	-140.	-27.	1.	40.	278.	34.	0.49	41.	49.	28.	-8.
28212	FCPADS	DISTIL	0.	-0.024	0.	0.012	0.05	20.	66.	7.	31.	85.	9.	0.53	9.	0.	-8.	-4.
28212	FCPADS	DISTIL	0.	-0.809	0.	0.392	0.28	-126.	121.	10.	260.	778.	81.	0.85	45.	109.	53.	-35.
28212	FCMCD5	DISTIL	0.	-0.020	0.	0.015	0.07	5.	66.	6.	17.	86.	8.	0.47	9.	0.	-12.	-4.
28212	FCMCD5	DISTIL	0.	-0.535	0.	0.414	0.36	-486.	120.	-1.	-181.	639.	55.	0.47	34.	86.	48.	-23.
28213	STM141	RESIDU	0.	-0.002	0.	0.003	0.01	-1.	-1.	-0.	1.	2.	0.	0.01	-0.	0.	60.	-0.
28213	STM141	COAL-F	0.	-0.002	0.	0.003	0.01	-1.	-4.	-0.	1.	-1.	1.	0.00	-2.	0.	47.	-0.
28213	STM141	COAL-A	0.	-0.002	0.	0.003	0.01	3.	-4.	-0.	4.	-1.	1.	0.01	-1.	0.	46.	-0.
28213	STM088	RESIDU	0.	-0.001	0.	0.001	0.00	-0.	-0.	-0.	0.	1.	0.	0.00	-0.	0.	60.	-0.
28213	STM088	COAL-F	0.	-0.001	0.	0.001	0.00	-0.	-3.	-0.	1.	-2.	1.	-0.00	-2.	0.	47.	-0.
28213	STM088	COAL-A	0.	-0.001	0.	0.001	0.00	3.	-3.	-0.	4.	-2.	1.	0.01	-1.	0.	46.	-0.
28213	PFBSTM	COAL-P	0.	-0.004	0.	0.005	0.01	4.	-5.	0.	7.	0.	2.	0.02	-2.	0.	47.	-0.
28213	T1STMT	RESIDU	0.	-0.005	0.	0.008	0.02	-2.	-7.	-0.	2.	5.	0.	0.02	-6.	0.	63.	-1.
28213	T1STMT	JAL	0.	-0.005	0.	0.008	0.02	-2.	-6.	-0.	3.	2.	1.	0.01	-8.	0.	50.	-1.

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 35

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				*****CAPITL--ELECTRIC POWER---							
		ECS *****DIRECT*****	TOTAL	FESR	DIRECT	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	SAVED					
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH					
28213	TIHRSG	RESIDU	0.	-0.006	0.	0.003	0.01	-2.	-2.	-0.	1.	3.	0. 0.01	-6.	0.	63.	-1.
28213	TIHRSG	COAL	0.	-0.006	0.	0.003	0.01	-2.	-6.	-0.	1.	-1.	1. 0.00	-8.	0.	50.	-1.
28213	STIRL	DISTIL	0.	-0.011	0.	0.008	0.02	-1.	-1.	0.	5.	9.	2. 0.04	1.	0.	67.	-0.
28213	STIRL	RESIDU	0.	-0.011	0.	0.008	0.02	-4.	-4.	-1.	2.	5.	-1. 0.02	1.	0.	59.	0.
28213	STIRL	COAL	0.	-0.011	0.	0.008	0.02	-4.	-9.	-1.	2.	1.	1. 0.01	-1.	0.	46.	0.
28213	HEGT60	COAL-A	0.	-0.048	0.	0.003	0.01	-6.	-32.	-2.	10.	-3.	1. 0.02	-12.	0.	52.	-1.
28213	HEGT00	COAL-A	0.	-0.012	0.	0.003	0.01	0.	-10.	-1.	5.	-2.	1. 0.01	-5.	0.	48.	-0.
28213	FCMCCL	COAL	0.	-0.012	0.	0.014	0.03	5.	6.	1.	13.	20.	3. 0.08	-5.	0.	48.	-0.
28213	FCSTCL	COAL	0.	-0.015	0.	0.018	0.04	5.	6.	1.	16.	24.	3. 0.10	-6.	0.	48.	-0.
28213	IGGTST	COAL	0.	-0.013	0.	0.009	0.02	-4.	-11.	1.	3.	2.	2. 0.02	-6.	0.	49.	-0.
28213	GTSGAR	RESIDU	-0.017	0.	-0.017	0.029	0.02	-6.	-6.	-0.	3.	9.	2. 0.03	1.	0.	59.	0.
28213	GTAC09	RESIDU	0.	-0.010	0.	0.011	0.02	-9.	-4.	-1.	-3.	7.	-0. 0.01	1.	0.	59.	0.
28213	GTAC12	RESIDU	0.	-0.012	0.	0.014	0.03	-11.	-5.	-1.	-3.	9.	-0. 0.01	1.	0.	58.	0.
28213	GTAC16	RESIDU	0.	-0.015	0.	0.015	0.03	-13.	-6.	-2.	-3.	10.	-0. 0.01	1.	0.	58.	0.
28213	GTWC16	RESIDU	0.	-0.016	0.	0.014	0.03	-14.	-7.	-2.	-4.	10.	-0. 0.01	1.	0.	58.	0.
28213	CC1626	RESIDU	0.	-0.023	0.	0.019	0.04	-17.	-9.	-2.	-4.	13.	-1. 0.02	1.	0.	58.	0.
28213	CC1622	RESIDU	0.	-0.020	0.	0.018	0.04	-15.	-8.	-2.	-4.	12.	-0. 0.02	1.	0.	58.	0.
28213	CC1222	RESIDU	0.	-0.019	0.	0.018	0.04	-15.	-8.	-2.	-4.	12.	-0. 0.02	1.	0.	58.	0.
28213	CC0822	RESIDU	0.	-0.014	0.	0.015	0.03	-12.	-6.	-1.	-3.	10.	-0. 0.01	1.	0.	59.	0.
28213	DEADV3	RESIDU	0.	-0.059	0.	0.027	0.06	-65.	-24.	-5.	-38.	22.	-2. -0.04	1.	0.	57.	-0.
28213	DEHTPM	RESIDU	0.	-0.015	0.	0.012	0.03	-23.	-6.	-2.	-14.	8.	-1. -0.01	-1.	0.	60.	-0.
28213	DES0A3	DISTIL	-0.078	0.	-0.078	0.105	0.06	-175.	-9.	0.	-142.	45.	3. -0.22	0.	0.	65.	-1.
28213	DES0A3	RESIDU	-0.078	0.	-0.078	0.105	0.06	-374.	-29.	-1.	-340.	28.	6. -0.70	0.	0.	58.	-0.
28213	GTSGAD	DISTIL	-0.013	0.	-0.013	0.025	0.03	-5.	-2.	0.	3.	11.	1. 0.04	1.	0.	66.	0.
28213	GTRA08	DISTIL	0.	-0.028	0.	0.020	0.04	-12.	-6.	0.	4.	20.	3. 0.06	1.	0.	65.	-0.
28213	GTRA12	DISTIL	0.	-0.025	0.	0.020	0.04	-11.	-5.	0.	4.	20.	3. 0.06	1.	0.	65.	-0.
28213	GTRA16	DISTIL	0.	-0.023	0.	0.018	0.04	-10.	-5.	0.	3.	18.	3. 0.06	1.	0.	66.	-0.
28213	GTR208	DISTIL	0.	-0.018	0.	0.015	0.03	-8.	-3.	0.	3.	15.	3. 0.05	1.	0.	66.	-0.
28213	GTR212	DISTIL	0.	-0.020	0.	0.016	0.03	-9.	-4.	0.	3.	16.	3. 0.05	1.	0.	66.	-0.
28213	GTR216	DISTIL	0.	-0.020	0.	0.017	0.03	-9.	-4.	0.	3.	17.	3. 0.05	1.	0.	66.	-0.
28213	GTRW08	DISTIL	0.	-0.036	0.	0.020	0.04	-15.	-8.	-0.	3.	23.	4. 0.07	1.	0.	65.	-0.
28213	GTRW12	DISTIL	0.	-0.034	0.	0.022	0.05	-14.	-8.	-0.	4.	23.	4. 0.07	1.	0.	65.	-0.
28213	GTRW16	DISTIL	0.	-0.030	0.	0.020	0.04	-13.	-7.	-0.	3.	21.	4. 0.06	1.	0.	65.	-0.
28213	GTR308	DISTIL	0.	-0.028	0.	0.014	0.03	-12.	-6.	0.	2.	17.	3. 0.05	1.	0.	66.	-0.
28213	GTR312	DISTIL	0.	-0.025	0.	0.018	0.04	-11.	-5.	0.	3.	18.	3. 0.06	1.	0.	66.	-0.
28213	GTR316	DISTIL	0.	-0.024	0.	0.017	0.04	-10.	-5.	0.	3.	18.	3. 0.05	1.	0.	66.	-0.
28213	FCPADS	DISTIL	0.	-0.059	0.	0.029	0.06	-9.	6.	1.	19.	65.	7. 0.18	3.	0.	66.	-1.
28213	FCMCDS	DISTIL	0.	-0.039	0.	0.030	0.06	-36.	6.	-0.	-13.	45.	5. 0.08	2.	0.	65.	-1.
28221	STM141	RESIDU	0.	-0.007	0.	0.011	0.12	-9.	4.	-0.	-4.	12.	-1. 0.09	3.	0.	42.	0.
28221	STM141	COAL-F	0.	-0.007	0.	0.011	0.12	-9.	-4.	-0.	-4.	6.	1. 0.03	-0.	0.	43.	0.
28221	STM141	COAL-A	0.	-0.007	0.	0.011	0.12	-1.	-4.	-0.	5.	6.	1. 0.14	1.	0.	39.	0.
28221	STM088	RESIDU	0.	-0.005	0.	0.008	0.09	-9.	5.	-0.	-5.	11.	-1. 0.06	3.	0.	44.	0.
28221	STM088	COAL-F	0.	-0.005	0.	0.008	0.09	-9.	-3.	-0.	-5.	4.	1. 0.00	-0.	0.	44.	0.
28221	STM088	COAL-A	0.	-0.005	0.	0.008	0.09	-1.	-3.	-0.	4.	4.	1. 0.10	1.	0.	41.	0.
28221	PFBSTM	COAL-P	0.	-0.011	0.	0.018	0.19	1.	-7.	1.	10.	9.	3. 0.27	-1.	0.	45.	0.
28221	TISTMT	RESIDU	0.	-0.015	0.	0.024	0.25	-12.	0.	-1.	-0.	20.	-0. 0.24	-8.	0.	77.	-1.

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FUEL UNITS =

EMISSION UNITS =

COST = \$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING*****				*****EMISSIONS SAVING*****				CAPITL--ELECTRIC POWER---			
		*****DIRECT*****		-----TOTAL-----		-----DIRECT-----		*****TOTAL*****		EMSR SAVING		TOTAL COST LAEC	
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT
													MWH
28221	TISTMT COAL	0.	-0.015	0.	0.024	0.25	-12.	-9.	-1.	0.	12.	2.	0.17
28221	TIHRSG RESIDU	0.	-0.010	0.	0.009	0.09	-10.	3.	-0.	-5.	12.	-1.	0.07
28221	TIHRSG COAL	0.	-0.010	0.	0.009	0.09	-10.	-6.	-0.	-4.	4.	1.	0.01
28221	STIRL DISTIL	0.	-0.026	0.	0.021	0.22	-9.	3.	1.	6.	29.	3.	0.46
28221	STIRL RESIDU	0.	-0.026	0.	0.021	0.22	-16.	-4.	-3.	-1.	20.	-2.	0.20
28221	STIRL COAL	0.	-0.026	0.	0.021	0.22	-16.	-16.	-1.	-1.	10.	1.	0.13
28221	HEGT85 COAL-A	0.	-0.051	0.	0.012	0.13	-10.	-31.	-3.	10.	4.	1.	0.18
28221	HEGT85 COAL-A	0.	-0.141	0.	0.033	0.16	-27.	-84.	-7.	29.	11.	3.	0.23
28221	HEGT60 COAL-A	0.	-0.049	0.	0.014	0.15	-10.	-29.	-2.	10.	5.	1.	0.20
28221	HEGT60 COAL-A	0.	-0.055	0.	0.016	0.15	-11.	-33.	-3.	11.	6.	1.	0.20
28221	HEGT00 COAL-A	0.	-0.023	0.	0.007	0.08	-6.	-14.	-1.	4.	3.	1.	0.09
28221	FCMCCL COAL	0.	-0.026	0.	0.030	0.31	4.	19.	1.	22.	50.	5.	0.91
28221	FCSTCL COAL	0.	-0.028	0.	0.035	0.37	1.	15.	1.	22.	49.	5.	0.90
28221	FCSTCL COAL	0.	-0.038	0.	0.047	0.40	4.	19.	1.	32.	66.	6.	1.00
28221	IGGTST COAL	0.	-0.033	0.	0.026	0.27	-19.	-20.	1.	0.	12.	5.	0.21
28221	GTSCAR RESIDU	-0.064	0.033	-0.064	0.091	0.28	-12.	-5.	1.	7.	27.	5.	0.46
28221	GTAC08 RESIDU	0.	-0.021	0.	0.024	0.25	-28.	-2.	-2.	-14.	21.	-2.	0.07
28221	GTAC12 RESIDU	0.	-0.027	0.	0.030	0.31	-31.	-4.	-3.	-13.	25.	-2.	0.11
28221	GTAC16 RESIDU	0.	-0.030	0.	0.033	0.34	-33.	-6.	-3.	-13.	27.	-2.	0.14
28221	GTAC16 RESIDU	0.	-0.031	0.	0.033	0.34	-34.	-6.	-3.	-14.	27.	-2.	0.14
28221	GTWC16 RESIDU	0.	-0.034	0.	0.030	0.31	-35.	-7.	-3.	-15.	26.	-2.	0.10
28221	GTWC16 RESIDU	0.	-0.036	0.	0.031	0.32	-37.	-8.	-4.	-15.	27.	-2.	0.10
28221	CC1626 RESIDU	0.	-0.034	0.	0.029	0.31	-32.	-7.	-3.	-12.	25.	-2.	0.13
28221	CC1626 RESIDU	0.	-0.057	0.	0.049	0.35	-49.	-16.	-5.	-18.	39.	-3.	0.17
28221	CC1622 RESIDU	0.	-0.033	0.	0.031	0.32	-32.	-7.	-3.	-12.	26.	-2.	0.14
28221	CC1622 RESIDU	0.	-0.049	0.	0.046	0.36	-45.	-13.	-5.	-15.	37.	-2.	0.17
28221	CC1222 RESIDU	0.	-0.032	0.	0.031	0.32	-32.	-6.	-3.	-12.	26.	-2.	0.15
28221	CC1222 RESIDU	0.	-0.049	0.	0.047	0.37	-44.	-13.	-5.	-14.	37.	-2.	0.18
28221	CC0822 RESIDU	0.	-0.030	0.	0.033	0.35	-32.	-6.	-3.	-12.	27.	-2.	0.16
28221	CC0822 RESIDU	0.	-0.036	0.	0.040	0.37	-37.	-8.	-4.	-13.	32.	-2.	0.17
28221	STIG15 RESIDU	0.	-0.052	0.	0.011	0.11	-39.	-14.	-2.	-19.	18.	-1.	-0.03
28221	STIG15 RESIDU	0.	-2.094	0.	0.438	0.17	-1272.	-831.	-62.	-473.	490.	3.	0.01
28221	STIG10 RESIDU	0.	-0.048	0.	0.016	0.16	-38.	-13.	-1.	-18.	20.	-1.	0.01
28221	STIG10 RESIDU	0.	-0.176	0.	0.058	0.22	-121.	-64.	-5.	-47.	58.	1.	0.05
28221	STIG1S RESIDU	0.	-0.045	0.	0.018	0.19	-38.	-12.	-1.	-18.	21.	-0.	0.02
28221	STIG1S RESIDU	0.	-0.099	0.	0.039	0.23	-74.	-33.	-2.	-31.	38.	1.	0.05
28221	DEADV3 RESIDU	0.	-0.041	0.	0.023	0.24	-54.	-10.	-3.	-34.	23.	-3.	-0.17
28221	DEADV3 RESIDU	0.	-0.095	0.	0.053	0.29	-117.	-31.	-8.	-70.	46.	-4.	-0.18
28221	DEHTPM RESIDU	0.	-0.030	0.	0.034	0.35	-53.	-5.	-3.	-33.	27.	-2.	-0.09
28221	DEHTPM RESIDU	0.	-0.032	0.	0.036	0.36	-57.	-6.	-3.	-35.	29.	-2.	-0.09
28221	DESOA3 DISTIL	-0.076	0.033	-0.076	0.096	0.20	-103.	7.	2.	-83.	39.	2.	-0.49
28221	DESOA3 DISTIL	-0.151	0.033	-0.151	0.203	0.26	-283.	-5.	2.	-229.	84.	6.	-0.76
28221	DESOA3 RESIDU	-0.076	0.033	-0.076	0.096	0.20	-225.	-9.	1.	-204.	25.	5.	-2.07
28221	DESOA3 RESIDU	-0.151	0.033	-0.151	0.203	0.26	-608.	-37.	0.	-553.	56.	11.	-2.65
28221	GTSCAD DISTIL	-0.060	0.033	-0.060	0.087	0.29	-8.	1.	2.	10.	38.	2.	0.59
28221	GTRA0 DISTIL	0.	-0.033	0.	0.030	0.31	-20.	1.	1.	-0.	35.	4.	0.47

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FUEL UNITS =

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FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****										-----EMISSIONS SAVINGS-----				CAPITL--ELECTRIC POWER---		
		ECS *****DIRECT*****					-----TOTAL-----FESR-----DIRECT-----					*****TOTAL*****				EMSR SAVING	TOTAL EXPORT MWH	COST LAEC SAVED
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	NOX	SOX	PART			
28221	GTRA08	DISTIL	0.	-0.047	0.	0.042	0.34	-27.	-3.	0.	1.	46.	6.	0.48	6.	2.	29.	-0.
28221	GTRA12	DISTIL	0.	-0.033	0.	0.030	0.32	-20.	1.	1.	0.	36.	4.	0.48	4.	0.	30.	-0.
28221	GTRA12	DISTIL	0.	-0.045	0.	0.042	0.35	-27.	-2.	0.	1.	45.	5.	0.49	5.	2.	29.	-0.
28221	GTRA16	DISTIL	0.	-0.033	0.	0.031	0.32	-20.	1.	1.	-0.	36.	4.	0.47	4.	0.	31.	-0.
28221	GTRA16	DISTIL	0.	-0.042	0.	0.039	0.35	-25.	-1.	0.	1.	43.	5.	0.48	5.	2.	29.	-0.
28221	GTR208	DISTIL	0.	-0.033	0.	0.030	0.32	-21.	1.	1.	-1.	36.	4.	0.46	5.	0.	27.	-0.
28221	GTR208	DISTIL	0.	-0.035	0.	0.033	0.32	-23.	0.	0.	-1.	37.	4.	0.46	5.	0.	25.	-0.
28221	GTR212	DISTIL	0.	-0.033	0.	0.030	0.32	-21.	1.	1.	-1.	36.	4.	0.47	4.	0.	29.	-0.
28221	GTR212	DISTIL	0.	-0.038	0.	0.035	0.33	-24.	-0.	0.	-0.	39.	5.	0.47	5.	1.	27.	-0.
28221	GTR216	DISTIL	0.	-0.032	0.	0.031	0.32	-21.	1.	1.	-0.	36.	4.	0.47	4.	0.	29.	-0.
28221	GTR216	DISTIL	0.	-0.038	0.	0.036	0.34	-24.	-0.	0.	0.	40.	5.	0.48	5.	1.	27.	-0.
28221	GTRW08	DISTIL	0.	-0.038	0.	0.025	0.26	-22.	-0.	0.	-1.	34.	4.	0.44	4.	0.	35.	-0.
28221	GTRW08	DISTIL	0.	-0.064	0.	0.042	0.30	-34.	-8.	-0.	-0.	50.	6.	0.45	6.	4.	34.	-1.
28221	GTRW12	DISTIL	0.	-0.037	0.	0.027	0.28	-21.	0.	0.	-1.	35.	4.	0.45	4.	0.	34.	-0.
28221	GTRW12	DISTIL	0.	-0.063	0.	0.046	0.32	-34.	-7.	0.	1.	52.	6.	0.47	6.	4.	33.	-1.
28221	GTRW16	DISTIL	0.	-0.036	0.	0.027	0.28	-21.	0.	0.	-1.	35.	4.	0.45	3.	0.	35.	-0.
28221	GTRW16	DISTIL	0.	-0.058	0.	0.043	0.32	-32.	-6.	0.	1.	49.	6.	0.47	6.	4.	33.	-1.
28221	GTR308	DISTIL	0.	-0.040	0.	0.023	0.24	-23.	-1.	0.	-3.	34.	4.	0.41	4.	0.	34.	-0.
28221	GTR308	DISTIL	0.	-0.051	0.	0.030	0.26	-29.	-4.	0.	-3.	40.	5.	0.42	6.	2.	32.	-1.
28221	GTR312	DISTIL	0.	-0.036	0.	0.027	0.29	-21.	0.	0.	-1.	35.	4.	0.45	4.	0.	32.	-0.
28221	GTR312	DISTIL	0.	-0.050	0.	0.038	0.32	-29.	-4.	0.	-0.	45.	5.	0.46	6.	2.	30.	-0.
28221	GTR316	DISTIL	0.	-0.036	0.	0.027	0.28	-22.	0.	0.	-1.	35.	4.	0.45	4.	0.	33.	-0.
28221	GTR316	DISTIL	0.	-0.049	0.	0.037	0.31	-28.	-4.	0.	-0.	44.	5.	0.46	5.	2.	31.	-0.
28221	FCPADS	DISTIL	0.	-0.043	0.	0.021	0.22	-11.	13.	1.	9.	48.	5.	0.74	4.	0.	48.	-1.
28221	FCPADS	DISTIL	0.	-0.130	0.	0.063	0.28	-27.	20.	2.	35.	125.	13.	0.85	8.	12.	52.	-5.
28221	FCMCDS	DISTIL	0.	-0.036	0.	0.028	0.29	-37.	14.	1.	-17.	49.	4.	0.43	3.	0.	43.	-1.
28221	FCMCDS	DISTIL	0.	-0.086	0.	0.067	0.36	-85.	19.	-0.	-36.	103.	9.	0.45	6.	8.	46.	-3.
28241	STM141	RESIDU	0.	-0.004	0.	0.007	0.02	-1.	-2.	-0.	2.	4.	0.	0.02	-0.	0.	59.	0.
28241	STM141	COAL-F	0.	-0.004	0.	0.007	0.02	-1.	-8.	-0.	2.	-1.	2.	0.01	-2.	0.	48.	0.
28241	STM141	COAL-A	0.	-0.004	0.	0.007	0.02	5.	-8.	-0.	9.	-1.	2.	0.03	-2.	0.	47.	0.
28241	STM088	RESIDU	0.	-0.003	0.	0.004	0.01	-1.	-1.	-0.	1.	3.	0.	0.01	0.	0.	60.	0.
28241	STM088	COAL-F	0.	-0.003	0.	0.004	0.01	-1.	-7.	-0.	2.	-3.	1.	0.00	-2.	0.	48.	0.
28241	STM088	COAL-A	0.	-0.003	0.	0.004	0.01	5.	-7.	-0.	8.	-3.	1.	0.03	-2.	0.	47.	0.
28241	PFBSTM	COAL-P	0.	-0.008	0.	0.012	0.04	7.	-10.	1.	14.	1.	3.	0.07	-3.	0.	48.	0.
28241	TISTMT	RESIDU	0.	-0.011	0.	0.017	0.06	-4.	-4.	-1.	5.	10.	1.	0.06	-9.	0.	67.	-1.
28241	TISTMT	COAL	0.	-0.011	0.	0.017	0.06	-4.	-12.	-1.	5.	4.	2.	0.04	-13.	0.	67.	-1.
28241	TIHRSG	RESIDU	0.	-0.010	0.	0.007	0.02	-3.	-4.	-0.	2.	5.	0.	0.02	-9.	0.	68.	-1.
28241	TIHRSG	COAL	0.	-0.010	0.	0.007	0.02	-3.	-11.	-0.	2.	-2.	2.	0.01	-13.	0.	67.	-1.
28241	STIRL	DISTIL	0.	-0.021	0.	0.016	0.05	-1.	-3.	1.	11.	18.	4.	0.12	2.	0.	64.	-0.
28241	STIRL	RESIDU	0.	-0.021	0.	0.016	0.05	-7.	-8.	-2.	4.	11.	-1.	0.05	2.	0.	66.	0.
28241	STIRL	COAL	0.	-0.021	0.	0.016	0.05	-7.	-18.	-1.	5.	3.	2.	0.04	-1.	0.	46.	1.
28241	HEGT60	COAL-A	0.	-0.067	0.	0.010	0.03	-7.	-46.	-3.	17.	-3.	2.	0.06	-15.	0.	59.	-1.
28241	HEGT00	COAL-A	0.	-0.022	0.	0.006	0.02	1.	-19.	-1.	10.	-3.	2.	0.03	-7.	0.	52.	-0.
28241	FCMCCL	COAL	0.	-0.022	0.	0.025	0.09	10.	11.	1.	25.	38.	5.	0.25	-7.	0.	51.	-0.
28241	FCSTCL	COAL	0.	-0.029	0.	0.036	0.12	10.	11.	1.	31.	47.	6.	0.31	-8.	0.	51.	-0.
28241	IGGTST	COAL	0.	-0.025	0.	0.019	0.06	-9.	-21.	1.	5.	4.	5.	0.05	-8.	0.	52.	-0.

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DATE 06/12/79

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GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 38

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST *\$*10**9

TYPE MATCH=HEAT

PROCS	ECS	ECS	*****FUEL SAVINGS*****				- - - EMISSIONS SAVINGS - - -						CAPITL--ELECTRIC POWER---				
			*****DIRECT*****	TOTAL	FESR	DIRECT	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	SAVED				
			FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH				
28241	GTSC08	RESIDU	-0.030	0.	-0.030	0.052	0.08	-11.	-11.	-0.	5.	17.	3. 0.10	2.	0.	55.	0
28241	GTAC08	RESIDU	0.	-0.018	0.	0.021	0.07	-18.	-7.	-2.	-5.	13.	-1. 0.03	2.	0.	56.	0
28241	GTAC12	RESIDU	0.	-0.023	0.	0.025	0.09	-21.	-9.	-3.	-5.	17.	-1. 0.04	2.	0.	54.	1
28241	GTAC16	RESIDU	0.	-0.027	0.	0.028	0.10	-23.	-11.	-3.	-3.	19.	-1. 0.05	2.	0.	54.	1
28241	GTWC16	RESIDU	0.	-0.031	0.	0.027	0.09	-25.	-12.	-3.	-7.	18.	-1. 0.04	2.	0.	54.	1
28241	CC1626	RESIDU	0.	-0.045	0.	0.038	0.13	-34.	-18.	-4.	-8.	26.	-1. 0.06	3.	0.	52.	1
28241	CC1622	RESIDU	0.	-0.039	0.	0.035	0.12	-30.	-15.	-4.	-7.	24.	-1. 0.06	3.	0.	53.	1
28241	CC1222	RESIDU	0.	-0.038	0.	0.035	0.12	-30.	-15.	-4.	-6.	24.	-1. 0.06	3.	0.	52.	1
28241	CC0822	RESIDU	0.	-0.028	0.	0.030	0.10	-24.	-11.	-3.	-5.	20.	-1. 0.05	2.	0.	54.	1
28241	STIG15	RESIDU	0.	-0.223	0.	0.047	0.16	-135.	-89.	-7.	-50.	52.	0. 0.01	13.	0.	43.	-1
28241	STIG15	RESIDU	0.	-1.795	0.	0.375	0.17	-1084.	-718.	-53.	-399.	415.	3. 0.01	131.	178.	39.	-27
28241	STIG10	RESIDU	0.	-0.151	0.	0.050	0.17	-98.	-60.	-4.	-34.	45.	2. 0.05	10.	0.	44.	0
28241	STIG15	RESIDU	0.	-0.085	0.	0.033	0.11	-58.	-34.	-2.	-20.	28.	2. 0.03	6.	0.	50.	0
28241	DEADV3	RESIDU	0.	-0.098	0.	0.048	0.16	-110.	-39.	-8.	-64.	38.	-4. -0.11	3.	0.	50.	0
28241	DEHTPM	RESIDU	0.	-0.028	0.	0.026	0.09	-43.	-11.	-3.	-26.	18.	-1. -0.03	-0.	0.	57.	0
28241	DESOA3	DISTIL	-0.126	0.	-0.126	0.174	0.16	-289.	-15.	0.	-235.	76.	4. -0.59	1.	0.	59.	-2
28241	DESOA3	RESIDU	-0.126	0.	-0.126	0.174	0.16	-620.	-47.	-1.	-564.	47.	9. -1.92	1.	0.	53.	-1
28241	GTSGAD	DISTIL	-0.024	0.	-0.024	0.047	0.08	-10.	-4.	0.	5.	21.	2. 0.11	2.	0.	62.	0
28241	GTRA08	DISTIL	0.	-0.047	0.	0.036	0.12	-20.	-10.	0.	7.	36.	6. 0.18	3.	0.	59.	0
28241	GTRA12	DISTIL	0.	-0.044	0.	0.036	0.12	-19.	-9.	0.	7.	36.	6. 0.18	3.	0.	59.	0
28241	GTRA16	DISTIL	0.	-0.040	0.	0.034	0.11	-17.	-8.	0.	7.	33.	6. 0.17	2.	0.	60.	-0
28241	GTR208	DISTIL	0.	-0.033	0.	0.028	0.09	-14.	-6.	0.	5.	28.	5. 0.14	2.	0.	61.	0
28241	GTR212	DISTIL	0.	-0.035	0.	0.030	0.10	-15.	-7.	0.	6.	30.	5. 0.15	2.	0.	61.	0
28241	GTR216	DISTIL	0.	-0.035	0.	0.031	0.11	-16.	-7.	0.	6.	31.	5. 0.15	2.	0.	61.	0
28241	GTRW08	DISTIL	0.	-0.062	0.	0.037	0.12	-26.	-14.	-0.	6.	41.	7. 0.19	4.	0.	58.	-0
28241	GTRW12	DISTIL	0.	-0.059	0.	0.040	0.13	-25.	-13.	-0.	7.	42.	7. 0.20	4.	0.	58.	-0
28241	GTRW16	DISTIL	0.	-0.053	0.	0.037	0.13	-23.	-12.	0.	7.	39.	6. 0.19	3.	0.	59.	-0
28241	GTR308	DISTIL	0.	-0.049	0.	0.025	0.09	-21.	-11.	0.	3.	31.	6. 0.15	3.	0.	61.	-0
28241	GTR312	DISTIL	0.	-0.045	0.	0.033	0.11	-19.	-9.	0.	6.	34.	6. 0.17	3.	0.	60.	-0
28241	GTR316	DISTIL	0.	-0.044	0.	0.032	0.11	-19.	-9.	0.	6.	33.	6. 0.16	3.	0.	60.	-0
28241	FCPADS	DISTIL	0.	-0.112	0.	0.054	0.18	-17.	11.	1.	36.	103.	12. 0.55	5.	0.	60.	-2
28241	FCMCDS	DISTIL	0.	-0.074	0.	0.057	0.19	-67.	11.	-0.	-25.	83.	9. 0.25	4.	0.	60.	-1
28242	STM141	RESIDU	0.	-0.007	0.	0.011	0.09	-2.	-3.	-0.	3.	7.	0. 0.09	0.	0.	54.	0
28242	STM141	COAL-F	0.	-0.007	0.	0.011	0.09	-2.	-9.	-0.	3.	2.	2. 0.06	-2.	0.	48.	0
28242	STM141	COAL-A	0.	-0.007	0.	0.011	0.09	4.	-9.	-0.	10.	2.	2. 0.11	-1.	0.	46.	0
28242	STM088	RESIDU	0.	-0.005	0.	0.008	0.07	-2.	-2.	-0.	3.	5.	0. 0.07	0.	0.	55.	0
28242	STM088	COAL-F	0.	-0.005	0.	0.008	0.07	-2.	-8.	-0.	3.	0.	1. 0.04	-2.	0.	48.	0
28242	STM088	COAL-A	0.	-0.005	0.	0.008	0.07	4.	-8.	-0.	9.	0.	1. 0.09	-1.	0.	47.	0
28242	PFBSTM	COAL-P	0.	-0.010	0.	0.016	0.13	6.	-11.	1.	14.	4.	3. 0.18	-3.	0.	49.	0
28242	TISTMT	RESIDU	0.	-0.013	0.	0.020	0.16	-4.	-5.	-1.	6.	13.	1. 0.17	-8.	0.	71.	-1
28242	TISTMT	COAL	0.	-0.013	0.	0.020	0.16	-4.	-12.	-1.	6.	6.	2. 0.13	-11.	0.	69.	-1
28242	TIHRSG	RESIDU	0.	-0.006	0.	0.007	0.05	-2.	-2.	-0.	2.	5.	0. 0.06	-7.	0.	73.	-1
28242	TIHRSG	COAL	0.	-0.006	0.	0.007	0.05	-2.	-8.	-0.	2.	-1.	1. 0.03	-10.	0.	68.	-1
28242	STIRL	DISTIL	0.	-0.020	0.	0.017	0.14	-2.	-3.	0.	10.	18.	4. 0.28	2.	0.	54.	0
28242	STIRL	RESIDU	0.	-0.020	0.	0.017	0.14	-7.	-7.	-2.	5.	12.	-1. 0.14	2.	0.	48.	0
28242	STIRL	JAL	0.	-0.020	0.	0.017	0.14	-7.	-17.	-1.	5.	4.	2. 0.10	-1.	0.	43.	0

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 39

FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
EMISSION UNITS= TIME 1990 LEVEL ALL
COST = \$*10**9 TYPE MATCH=HEAT

PROCS	ECS	ECS	*****FUEL SAVING*****	*****EMISSIONS SAVING*****	*****CAPITL--ELECTRIC POWER---													
			*****DIRECT*****	*****TOTAL*****	*****FESR*****	*****DIRECT*****	*****TOTAL*****	*****EMSR SAVING*****	*****TOTAL EXPORT*****	*****COST*****	*****LAEC*****	*****SAVED*****						
			FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART							
28242	HEGT85	COAL-A	0.	-0.059	0.	0.024	0.19	-7.	-40.	-3.	20.	6.	3.	0.25	-15.	0.	75.	-1.
28242	HEGT60	COAL-A	0.	-0.032	0.	0.013	0.10	-2.	-24.	-2.	13.	2.	2.	0.14	-10.	0.	65.	-1.
28242	HEGT00	COAL-A	0.	-0.016	0.	0.006	0.05	1.	-14.	-1.	8.	-2.	1.	0.07	-6.	0.	57.	-0.
28242	FCMCCL	COAL	0.	-0.019	0.	0.022	0.17	8.	9.	1.	21.	32.	4.	0.50	-6.	0.	66.	-0.
28242	FCSTCL	COAL	0.	-0.030	0.	0.038	0.30	8.	9.	1.	30.	48.	6.	0.72	-7.	0.	55.	0.
28242	IGGTST	COAL	0.	-0.027	0.	0.022	0.17	-9.	-21.	1.	7.	7.	5.	0.15	-7.	0.	58.	-0.
28242	GTSCAR	RESIDU	-0.021	0.	-0.021	0.041	0.15	-9.	-8.	-0.	4.	14.	2.	0.20	1.	0.	48.	0.
28242	GTAC08	RESIDU	0.	-0.016	0.	0.018	0.14	-15.	-6.	-2.	-5.	11.	-0.	0.05	1.	0.	48.	0.
28242	GTAC12	RESIDU	0.	-0.019	0.	0.022	0.17	-17.	-8.	-2.	-4.	14.	-0.	0.08	2.	0.	46.	1.
28242	GTAC16	RESIDU	0.	-0.022	0.	0.024	0.19	-19.	-9.	-2.	-4.	16.	-0.	0.09	2.	0.	45.	1.
28242	GTWC16	RESIDU	0.	-0.026	0.	0.023	0.18	-22.	-10.	-3.	-6.	16.	-1.	0.08	2.	0.	46.	0.
28242	CC1626	RESIDU	0.	-0.045	0.	0.040	0.32	-33.	-18.	-4.	-6.	27.	-1.	0.17	3.	0.	37.	1.
28242	CC1622	RESIDU	0.	-0.035	0.	0.038	0.30	-29.	-16.	-4.	-5.	25.	-1.	0.17	3.	0.	38.	1.
28242	CC1222	RESIDU	0.	-0.039	0.	0.038	0.30	-29.	-15.	-4.	-5.	25.	-1.	0.17	3.	0.	38.	1.
28242	CC0822	RESIDU	0.	-0.029	0.	0.033	0.26	-23.	-12.	-3.	-4.	21.	-0.	0.15	2.	0.	42.	1.
28242	STIG15	RESIDU	0.	-0.085	0.	0.018	0.14	-51.	-34.	-3.	-19.	20.	0.	0.01	3.	0.	47.	-0.
28242	STIG15	RESIDU	0.	-1.526	0.	0.319	0.17	-922.	-610.	-45.	-339.	353.	3.	0.01	100.	163.	38.	-24.
28242	STIG10	RESIDU	0.	-0.077	0.	0.025	0.20	-50.	-31.	-2.	-17.	23.	1.	0.06	3.	0.	42.	-0.
28242	STIG10	RESIDU	0.	-0.128	0.	0.042	0.22	-83.	-51.	-3.	-29.	38.	2.	0.06	7.	6.	38.	-1.
28242	STIG15	RESIDU	0.	-0.072	0.	0.028	0.22	-49.	-29.	-2.	-17.	24.	1.	0.07	4.	0.	38.	0.
28242	DEADV3	RESIDU	0.	-0.059	0.	0.037	0.29	-70.	-24.	-5.	-40.	27.	-2.	-0.13	1.	0.	42.	0.
28242	DEHTPM	RESIDU	0.	-0.022	0.	0.029	0.23	-36.	-9.	-2.	-19.	19.	-0.	-0.01	0.	0.	48.	0.
28242	DES0A3	DISTIL	-0.069	0.	-0.069	0.103	0.27	-170.	-6.	0.	-138.	47.	3.	-0.82	0.	0.	51.	-1.
28242	DES0A3	DISTIL	-0.072	0.	-0.072	0.108	0.27	-180.	-7.	0.	-146.	50.	3.	-0.83	1.	1.	50.	-1.
28242	DES0A3	RESIDU	-0.069	0.	-0.069	0.103	0.27	-366.	-26.	-1.	-333.	30.	6.	-2.78	0.	0.	45.	-0.
28242	DES0A3	RESIDU	-0.072	0.	-0.072	0.108	0.27	-386.	-27.	-1.	-351.	32.	6.	-2.79	1.	1.	44.	-0.
28242	GTSCAD	DISTIL	-0.019	0.	-0.019	0.039	0.16	-8.	-3.	0.	4.	18.	2.	0.23	2.	0.	53.	0.
28242	GTRA08	DISTIL	0.	-0.031	0.	0.030	0.24	-13.	-6.	0.	6.	28.	5.	0.34	2.	0.	49.	0.
28242	GTRA12	DISTIL	0.	-0.030	0.	0.030	0.24	-13.	-6.	0.	6.	28.	5.	0.34	2.	0.	49.	0.
28242	GTRA16	DISTIL	0.	-0.028	0.	0.028	0.22	-12.	-5.	0.	6.	27.	5.	0.32	1.	0.	50.	0.
28242	GTR208	DISTIL	0.	-0.024	0.	0.024	0.19	-11.	-4.	0.	5.	23.	4.	0.27	1.	0.	52.	0.
28242	GTR212	DISTIL	0.	-0.026	0.	0.025	0.20	-12.	-4.	0.	5.	24.	4.	0.29	1.	0.	51.	0.
28242	GTR216	DISTIL	0.	-0.026	0.	0.026	0.21	-12.	-4.	0.	5.	25.	4.	0.30	1.	0.	51.	0.
28242	GTRW08	DISTIL	0.	-0.043	0.	0.030	0.24	-18.	-9.	0.	5.	31.	5.	0.36	2.	0.	48.	-0.
28242	GTRW12	DISTIL	0.	-0.042	0.	0.033	0.26	-18.	-9.	0.	6.	33.	5.	0.38	2.	0.	46.	0.
28242	GTRW16	DISTIL	0.	-0.040	0.	0.031	0.25	-17.	-8.	0.	6.	31.	5.	0.36	2.	0.	48.	-0.
28242	GTR308	DISTIL	0.	-0.033	0.	0.022	0.17	-15.	-7.	0.	3.	24.	4.	0.28	2.	0.	52.	-0.
28242	GTR312	DISTIL	0.	-0.035	0.	0.028	0.22	-15.	-7.	0.	5.	28.	5.	0.33	2.	0.	49.	0.
28242	GTR316	DISTIL	0.	-0.035	0.	0.027	0.21	-15.	-7.	0.	5.	28.	5.	0.32	2.	0.	50.	-0.
28242	FCPADS	DISTIL	0.	-0.069	0.	0.034	0.27	-10.	8.	1.	23.	65.	8.	0.83	2.	0.	56.	-2.
28242	FCPADS	DISTIL	0.	-0.095	0.	0.046	0.28	-15.	9.	1.	31.	87.	10.	0.85	4.	4.	54.	-2.
28242	FCMCDS	DISTIL	0.	-0.058	0.	0.045	0.35	-52.	9.	-0.	-19.	66.	7.	0.46	2.	0.	51.	-1.
28242	FCMCDS	DISTIL	0.	-0.063	0.	0.049	0.36	-57.	9.	-0.	-21.	71.	7.	0.46	3.	1.	49.	-1.
28651	STM141	RESIDU	0.	-0.014	0.	0.023	0.07	-5.	52.	-1.	5.	63.	-11.	0.18	13.	0.	-57.	-2.
28651	STM141	RESIDU	0.	-0.115	0.	0.191	0.32	-40.	11.	-6.	55.	167.	-4.	0.38	36.	25.	6.	-0.
28651	STM141	COAL-F	0.	-0.014	0.	0.023	0.07	-5.	-8.	-1.	7.	12.	1.	0.06	-3.	0.	63.	-0.

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ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 40

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING*****				*****EMISSIONS SAVING*****				CAPITL--ELECTRIC POWER---								
		ECS *****DIRECT*****		TOTAL-----FESR-----		DIRECT-----		*****TOTAL*****		EMSR SAVING		TOTAL COST LAEC						
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		SAVING	EXPORT		SAVED	
28651	STM141	COAL-F	0.	-0.115	0.	0.191	0.32	-40.	-69.	-6.	58.	98.	12.	0.30	18.	25.	18.	3
28651	STM141	COAL-A	0.	-0.014	0.	0.023	0.07	60.	-8.	-1.	72.	12.	1.	0.26	-1.	0.	51.	0
28651	STM141	COAL-A	0.	-0.115	0.	0.191	0.32	46.	-69.	-6.	145.	98.	12.	0.45	24.	25.	13.	4
28651	STM088	RESIDU	0.	-0.014	0.	0.023	0.07	-5.	52.	-1.	5.	63.	-11.	0.18	13.	0.	-58.	-2
28651	STM088	RESIDU	0.	-0.087	0.	0.145	0.28	-31.	23.	-4.	41.	138.	-6.	0.35	31.	18.	1.	-0
28651	STM088	COAL-F	0.	-0.014	0.	0.023	0.07	-5.	-8.	-1.	7.	12.	1.	0.06	-3.	0.	65.	-0
28651	STM088	COAL-F	0.	-0.087	0.	0.145	0.28	-31.	-52.	-4.	44.	75.	9.	0.25	14.	18.	17.	2
28651	STM088	COAL-A	0.	-0.014	0.	0.023	0.07	60.	-8.	-1.	72.	12.	1.	0.26	-1.	0.	52.	0
28651	STM088	COAL-A	0.	-0.087	0.	0.145	0.28	50.	-52.	-4.	125.	75.	9.	0.41	18.	18.	13.	3
28651	PFBSTM	COAL-P	0.	-0.014	0.	0.023	0.07	60.	-9.	-1.	72.	12.	1.	0.26	-2.	0.	55.	-0
28651	PFBSTM	COAL-P	0.	-0.182	0.	0.290	0.38	66.	-109.	7.	217.	149.	35.	0.55	27.	41.	21.	3
28651	TISTMT	RESIDU	0.	-0.014	0.	0.023	0.07	-5.	52.	-1.	5.	63.	-11.	0.18	4.	0.	0.	-3
28651	TISTMT	RESIDU	0.	-0.145	0.	0.231	0.35	-51.	-1.	-7.	67.	193.	-2.	0.40	-22.	32.	52.	-9
28651	TISTMT	COAL	0.	-0.014	0.	0.023	0.07	-5.	-9.	-1.	7.	12.	1.	0.06	-11.	0.	118.	-1
28651	TISTMT	COAL	0.	-0.239	0.	0.381	0.42	-84.	-144.	-12.	116.	196.	25.	0.39	-63.	55.	58.	-8
28651	TIHRSG	RESIDU	0.	-0.019	0.	0.018	0.06	-7.	50.	-1.	3.	61.	-11.	0.16	-4.	0.	53.	-4
28651	TIHRSG	RESIDU	0.	-0.083	0.	0.080	0.18	-29.	24.	-4.	21.	103.	-9.	0.26	-30.	12.	85.	-9
28651	TIHRSG	COAL	0.	-0.019	0.	0.018	0.06	-7.	-11.	-1.	5.	9.	1.	0.05	-21.	0.	183.	-3
28651	TIHRSG	COAL	0.	-0.136	0.	0.132	0.24	-48.	-82.	-7.	39.	65.	9.	0.21	-74.	22.	104.	-10
28651	STIRL	DISTIL	0.	-0.020	0.	0.017	0.05	30.	86.	9.	42.	106.	11.	0.49	10.	0.	-31.	-5
28651	STIRL	DISTIL	0.	-0.237	0.	0.194	0.27	-20.	25.	5.	119.	261.	31.	0.60	28.	37.	31.	-9
28651	STIRL	RESIDU	0.	-0.020	0.	0.017	0.05	-7.	49.	-1.	2.	60.	-11.	0.16	10.	0.	-35.	-2
28651	STIRL	RESIDU	0.	-0.237	0.	0.194	0.27	-83.	-37.	-21.	52.	183.	-16.	0.32	28.	37.	26.	-5
28651	STIRL	COAL	0.	-0.020	0.	0.017	0.05	-7.	-12.	-1.	5.	8.	1.	0.04	-4.	0.	71.	-0
28651	STIRL	COAL	0.	-0.390	0.	0.319	0.32	-136.	-234.	-19.	92.	154.	22.	0.28	-4.	63.	37.	-2
28651	HEGT85	COAL-A	0.	-0.029	0.	0.008	0.03	58.	-17.	-1.	70.	3.	1.	0.23	-7.	0.	85.	-1
28651	HEGT85	COAL-A	0.	-1.708	0.	0.481	0.19	-262.	-1025.	-85.	443.	172.	44.	0.28	-19.	202.	43.	-21
28651	HEGT60	COAL-A	0.	-0.028	0.	0.009	0.03	58.	-17.	-1.	70.	3.	1.	0.23	-7.	0.	93.	-1
28651	HEGT60	COAL-A	0.	-0.743	0.	0.242	0.19	-86.	-446.	-37.	231.	93.	21.	0.29	-21.	89.	46.	-10
28651	HEGT00	COAL-A	0.	-0.029	0.	0.009	0.03	58.	-17.	-1.	70.	4.	1.	0.23	-7.	0.	91.	-1
28651	HEGT00	COAL-A	0.	-0.332	0.	0.111	0.15	-12.	-199.	-17.	131.	43.	10.	0.26	-14.	38.	48.	-5
28651	FCMCCL	COAL	0.	-0.561	0.	0.246	0.22	100.	172.	12.	360.	614.	60.	1.00	2.	72.	40.	-6
28651	FCSTCL	COAL	0.	-0.765	0.	0.539	0.34	100.	172.	12.	520.	885.	89.	1.00	23.	119.	34.	-4
28651	IGOTST	COAL	0.	-0.693	0.	0.225	0.19	-243.	-416.	9.	53.	86.	64.	0.18	15.	83.	35.	-4
28651	GTSCAR	RESIDU	-0.308	0.288	-0.308	0.325	0.05	67.	57.	12.	79.	77.	14.	0.53	11.	0.	-47.	-2
28651	GTSCAR	RESIDU	-0.560	0.288	-0.560	0.796	0.30	-13.	-38.	10.	150.	240.	40.	0.57	45.	44.	19.	-3
28651	GTAC08	RESIDU	0.	-0.017	0.	0.020	0.06	-6.	51.	-1.	4.	62.	-11.	0.17	12.	0.	-53.	-2
28651	GTAC08	RESIDU	0.	-0.189	0.	0.213	0.31	-139.	-18.	-17.	-13.	188.	-12.	0.25	41.	34.	14.	-1
28651	GTAC12	RESIDU	0.	-0.018	0.	0.020	0.06	-6.	51.	-1.	3.	62.	-11.	0.17	12.	0.	-53.	-2
28651	GTAC12	RESIDU	0.	-0.237	0.	0.264	0.33	-168.	-37.	-21.	-11.	221.	-12.	0.26	46.	43.	16.	-1
28651	GTAC16	RESIDU	0.	-0.018	0.	0.019	0.06	-6.	51.	-1.	3.	62.	-11.	0.17	12.	0.	-52.	-2
28651	GTAC16	RESIDU	0.	-0.271	0.	0.293	0.34	-188.	-51.	-23.	-11.	241.	-12.	0.27	49.	49.	18.	-2
28651	GTWC18	RESIDU	0.	-0.020	0.	0.017	0.05	-7.	50.	-1.	3.	61.	-11.	0.16	12.	0.	-49.	-2
28651	GTWC18	RESIDU	0.	-0.318	0.	0.279	0.32	-216.	-69.	-27.	-29.	239.	-16.	0.23	53.	52.	20.	-3
28651	CC1625	RESIDU	0.	-0.020	0.	0.017	0.05	-7.	5.	-1.	3.	61.	-11.	0.16	12.	0.	-41.	-2
28651	CC162	ESIDU	0.	-0.530	0.	0.463	0.36	-344.	-15.	-43.	-30.	364.	-17.	0.26	80.	90.	22.	-3

HONEYWELL PAGE PRINTING SYSTEM- P1105-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 41

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

		*****FUEL SAVING\$*****- - - EMISSIONS SAVING\$ - - -										CAPITL--ELECTRIC POWER---						
PROCS	ECS	ECS *****DIRECT*****	-----TOTAL-----		FESR	-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC				
		FUEL OIL+GAS	COAL OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED					
												MWH						
28651	CC1622	RESIDU	0.	-0.019	0.	0.018	0.06	-7.	50.	-1.	3.	61.	-11.	0.16	12.	0.	-51.	-2.
28651	CC1622	RESIDU	0.	-0.457	0.	0.437	0.37	-300.	-125.	-38.	-18.	341.	-15.	0.28	71.	80.	22.	-3.
28651	CC1222	RESIDU	0.	-0.019	0.	0.018	0.06	-7.	50.	-1.	3.	61.	-11.	0.16	12.	0.	-52.	-2.
28651	CC1222	RESIDU	0.	-0.452	0.	0.439	0.37	-297.	-123.	-37.	-15.	342.	-14.	0.28	72.	80.	21.	-3.
28651	CC0822	RESIDU	0.	-0.018	0.	0.020	0.06	-6.	51.	-1.	4.	62.	-11.	0.17	12.	0.	-52.	-2.
28651	CC0822	RESIDU	0.	-0.337	0.	0.377	0.38	-228.	-77.	-28.	-3.	294.	-11.	0.29	62.	63.	18.	-1.
28651	STIG15	RESIDU	0.	-0.031	0.	0.006	0.02	-11.	45.	-2.	-1.	56.	-12.	0.13	12.	0.	-40.	-3.
28651	STIG15	RESIDU	0.	-18.550	0.	3.879	0.17	-11156.	-7363.	-554.	-4081.	4339.	20.	0.01	1497.	2100.	37.	-297.
28651	STIG10	RESIDU	0.	-0.028	0.	0.009	0.03	-10.	46.	-1.	-0.	57.	-12.	0.14	12.	0.	-44.	-2.
28651	STIG10	RESIDU	0.	-1.560	0.	0.514	0.22	-962.	-566.	-45.	-308.	512.	4.	0.09	147.	191.	33.	-23.
28651	STIG1S	RESIDU	0.	-0.027	0.	0.010	0.03	-9.	47.	-1.	0.	58.	-12.	0.14	12.	0.	-46.	-2.
28651	STIG1S	RESIDU	0.	-0.874	0.	0.343	0.23	-550.	-292.	-24.	-167.	339.	1.	0.12	94.	111.	30.	-13.
28651	DEADV3	RESIDU	0.	-0.024	0.	0.014	0.04	-8.	48.	-1.	1.	59.	-11.	0.15	8.	0.	-20.	-3.
28651	DEADV3	RESIDU	0.	-0.803	0.	0.462	0.30	-824.	-264.	-64.	-425.	396.	-33.	-0.04	44.	115.	37.	-15.
28651	DEHTPM	RESIDU	0.	-0.017	0.	0.020	0.06	-6.	51.	-1.	4.	62.	-11.	0.17	8.	0.	-24.	-3.
28651	DEHTPM	RESIDU	0.	-0.280	0.	0.330	0.37	-327.	-54.	-24.	-135.	262.	-11.	0.14	27.	54.	28.	-5.
28651	DESOA3	DISTIL	-0.314	0.288	-0.314	0.325	0.04	93.	122.	14.	103.	133.	4.	0.74	9.	0.	-18.	-5.
28651	DESOA3	DISTIL	-1.286	0.288	-1.286	1.739	0.26	-1994.	-36.	14.	-1537.	719.	49.	-0.47	20.	133.	50.	-35.
28651	DESOA3	RESIDU	-0.314	0.288	-0.314	0.325	0.04	66.	55.	12.	78.	75.	14.	0.52	9.	0.	-24.	-3.
28651	DESOA3	RESIDU	-1.286	0.288	-1.286	1.739	0.26	-4375.	-311.	4.	-3908.	482.	90.	-2.04	20.	133.	44.	-24.
28651	GTSGAD	DISTIL	-0.306	0.288	-0.306	0.325	0.06	93.	123.	14.	103.	134.	4.	0.75	12.	0.	-50.	-5.
28651	GTSGAD	DISTIL	-0.526	0.288	-0.526	0.768	0.32	28.	87.	14.	179.	334.	22.	0.73	47.	42.	20.	-6.
28651	GTRA08	DISTIL	0.	-0.019	0.	0.018	0.05	30.	86.	9.	42.	107.	11.	0.50	11.	0.	-43.	-5.
28651	GTRA08	DISTIL	0.	-0.403	0.	0.368	0.35	-144.	-22.	3.	104.	400.	48.	0.55	59.	69.	26.	-9.
28651	GTRA12	DISTIL	0.	-0.019	0.	0.018	0.06	30.	86.	9.	42.	107.	11.	0.50	11.	0.	-44.	-5.
28651	GTRA12	DISTIL	0.	-0.389	0.	0.369	0.35	-138.	-18.	3.	105.	397.	48.	0.55	59.	68.	26.	-8.
28651	GTRA16	DISTIL	0.	-0.019	0.	0.018	0.06	30.	86.	9.	42.	107.	11.	0.50	11.	0.	-43.	-5.
28651	GTRA16	DISTIL	0.	-0.363	0.	0.347	0.35	-128.	-11.	3.	100.	378.	45.	0.55	55.	63.	26.	-8.
28651	GTR208	DISTIL	0.	-0.019	0.	0.018	0.06	30.	86.	9.	42.	107.	11.	0.50	12.	0.	-45.	-5.
28651	GTR208	DISTIL	0.	-0.305	0.	0.288	0.33	-105.	6.	4.	86.	330.	39.	0.54	31.	52.	24.	-7.
28651	GTR212	DISTIL	0.	-0.019	0.	0.018	0.06	30.	86.	9.	42.	107.	11.	0.50	11.	0.	-44.	-5.
28651	GTR212	DISTIL	0.	-0.329	0.	0.307	0.33	-114.	-1.	4.	90.	347.	42.	0.55	53.	56.	24.	-8.
28651	GTR216	DISTIL	0.	-0.019	0.	0.018	0.06	30.	86.	9.	42.	107.	11.	0.50	11.	0.	-44.	-5.
28651	GTR216	DISTIL	0.	-0.330	0.	0.321	0.34	-115.	-1.	4.	95.	355.	42.	0.55	52.	58.	25.	-8.
28651	GTRW08	DISTIL	0.	-0.022	0.	0.015	0.05	29.	86.	9.	41.	106.	11.	0.49	11.	0.	-39.	-5.
28651	GTRW08	DISTIL	0.	-0.554	0.	0.370	0.31	-204.	-64.	0.	93.	441.	55.	0.51	74.	83.	29.	-12.
28651	GTRW12	DISTIL	0.	-0.021	0.	0.016	0.05	30.	86.	9.	42.	106.	11.	0.49	11.	0.	-40.	-5.
28651	GTRW12	DISTIL	0.	-0.543	0.	0.402	0.33	-200.	-61.	0.	104.	456.	56.	0.53	75.	85.	28.	-12.
28651	GTRW16	DISTIL	0.	-0.021	0.	0.016	0.05	30.	86.	9.	42.	106.	11.	0.49	11.	0.	-39.	-5.
28651	GTRW16	DISTIL	0.	-0.502	0.	0.379	0.32	-184.	-49.	1.	100.	432.	53.	0.53	70.	79.	28.	-11.
28651	GTR308	DISTIL	0.	-0.023	0.	0.014	0.04	29.	85.	9.	41.	106.	11.	0.49	11.	0.	-40.	-5.
28651	GTR308	DISTIL	0.	-0.439	0.	0.265	0.27	-159.	-32.	2.	69.	353.	44.	0.49	60.	63.	29.	-11.
28651	GTR312	DISTIL	0.	-0.021	0.	0.016	0.05	30.	86.	9.	42.	106.	11.	0.49	11.	0.	-42.	-5.
28651	GTR312	DISTIL	0.	-0.437	0.	0.338	0.32	-158.	-31.	2.	92.	393.	48.	0.53	65.	69.	27.	-10.
28651	GTR316	DISTIL	0.	-0.021	0.	0.016	0.05	30.	86.	9.	42.	106.	11.	0.49	11.	0.	-41.	-5.
28651	GTR316	DISTIL	0.	-0.433	0.	0.331	0.31	-156.	-30.	2.	90.	388.	47.	0.53	63.	58.	27.	-10.

HONEYWELL PAGE PRINTING SYSTEM - P1108-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 42

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =
COST = \$*10**9

TIME 1990

LEVEL ALL

TYPE MATCH=POWR

*****FUEL SAVING S***** - - EMISSIONS SAVING S - - -													CAPITL--ELECTRIC POWER---				
PROCS	ECS	ECS	*****DIRECT*****	-----TOTAL-----	-----FESR-----	-----DIRECT-----	-----*****TOTAL*****	-----	-----	-----	-----	-----	EMSR	SAVING	TOTAL	COST	LAEC
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED
															MWH		
28651	FCPADS	DISTIL	0.	-0.025	0.	0.012	0.04	29.	85.	9.	41.	105.	11.	0.49	10.	0.	-17.
28651	FCPADS	DISTIL	0.	-1.152	0.	0.558	0.28	-187.	121.	11.	364.	1056.	113.	0.82	68.	157.	53.
28651	FCMCDS	DISTIL	0.	-0.021	0.	0.016	0.05	30.	86.	9.	42.	106.	11.	0.49	9.	0.	-21.
28651	FCMCDS	DISTIL	0.	-0.763	0.	0.590	0.36	-595.	119.	-2.	-160.	859.	78.	0.50	50.	123.	48.
28653	STM141	RESIDU	0.	-0.020	0.	0.033	0.10	-7.	50.	-1.	8.	69.	-10.	0.20	13.	0.	-28.
28653	STM141	RESIDU	0.	-0.044	0.	0.073	0.18	-15.	40.	-2.	20.	94.	-9.	0.26	19.	6.	-8.
28653	STM141	COAL-F	0.	-0.020	0.	0.033	0.10	-7.	12.	-1.	10.	17.	2.	0.09	-3.	0.	52.
28653	STM141	COAL-F	0.	-0.044	0.	0.073	0.18	-15.	26.	-2.	22.	37.	5.	0.16	6.	6.	20.
28653	STM141	COAL-A	0.	-0.020	0.	0.033	0.10	60.	-12.	-1.	76.	17.	2.	0.28	1.	0.	35.
28653	STM141	COAL-A	0.	-0.044	0.	0.073	0.18	56.	-26.	-2.	94.	37.	5.	0.34	13.	6.	4.
28653	STM088	RESIDU	0.	-0.020	0.	0.033	0.10	-7.	50.	-1.	8.	69.	-10.	0.20	13.	0.	-31.
28653	STM088	RESIDU	0.	-0.029	0.	0.047	0.13	-10.	46.	-1.	12.	79.	-10.	0.22	17.	2.	-24.
28653	STM088	COAL-F	0.	-0.020	0.	0.033	0.10	-7.	12.	-1.	10.	17.	2.	0.09	-2.	0.	48.
28653	STM088	COAL-F	0.	-0.029	0.	0.047	0.13	-10.	17.	-1.	14.	24.	3.	0.12	4.	2.	19.
28653	STM088	COAL-A	0.	-0.020	0.	0.033	0.10	60.	-12.	-1.	76.	17.	2.	0.28	3.	0.	27.
28653	STM088	COAL-A	0.	-0.029	0.	0.047	0.13	58.	-17.	-1.	83.	24.	3.	0.31	10.	2.	-1.
28653	PFBSTM	COAL-P	0.	-0.021	0.	0.032	0.09	65.	-12.	2.	82.	16.	5.	0.31	-3.	0.	55.
28653	PFBSTM	COAL-P	0.	-0.084	0.	0.129	0.26	73.	-51.	9.	142.	66.	21.	0.47	9.	15.	24.
28653	TISTMT	RESIDU	0.	-0.020	0.	0.032	0.09	-7.	50.	-1.	7.	69.	-10.	0.20	-1.	0.	40.
28653	TISTMT	RESIDU	0.	-0.114	0.	0.180	0.31	-40.	12.	-6.	52.	161.	-4.	0.37	-27.	23.	59.
28653	TISTMT	COAL	0.	-0.020	0.	0.032	0.09	-7.	12.	-1.	10.	16.	2.	0.08	-18.	0.	123.
28653	TISTMT	COAL	0.	-0.114	0.	0.180	0.31	-40.	-68.	-6.	55.	92.	12.	0.28	-48.	23.	72.
28653	TIHRSG	RESIDU	0.	-0.035	0.	0.017	0.05	-12.	44.	-2.	2.	63.	-12.	0.16	-9.	0.	84.
28653	TIHRSG	RESIDU	0.	-0.122	0.	0.059	0.13	-43.	9.	-6.	12.	96.	-12.	0.21	-36.	12.	93.
28653	TIHRSG	COAL	0.	-0.035	0.	0.017	0.05	-12.	-21.	-2.	4.	7.	1.	0.04	-27.	0.	171.
28653	TIHRSG	COAL	0.	-0.122	0.	0.059	0.13	-43.	-73.	-6.	15.	26.	5.	0.10	-56.	12.	115.
28653	STIRL	DISTIL	0.	-0.031	0.	0.022	0.06	28.	84.	9.	45.	112.	12.	0.50	11.	0.	-9.
28653	STIRL	DISTIL	0.	-0.193	0.	0.137	0.22	-10.	38.	6.	97.	218.	26.	0.57	19.	26.	32.
28653	STIRL	RESIDU	0.	-0.031	0.	0.022	0.06	-11.	46.	-4.	4.	65.	-13.	0.16	11.	0.	-14.
28653	STIRL	RESIDU	0.	-0.193	0.	0.137	0.22	-68.	-19.	-22.	35.	147.	-22.	0.27	19.	26.	28.
28653	STIRL	COAL	0.	-0.031	0.	0.022	0.06	-11.	-18.	-2.	6.	10.	2.	0.05	-3.	0.	57.
28653	STIRL	COAL	0.	-0.193	0.	0.137	0.22	-68.	-116.	-10.	39.	65.	10.	0.19	-4.	26.	39.
28653	HEGT00	COAL-A	0.	-0.043	0.	0.009	0.03	52.	-26.	-2.	69.	3.	1.	0.21	-9.	0.	89.
28653	HEGT00	COAL-A	0.	-0.242	0.	0.050	0.09	5.	-145.	-12.	99.	15.	5.	0.21	-15.	22.	53.
28653	FCMCCL	COAL	0.	-0.025	0.	0.028	0.08	11.	18.	1.	28.	47.	4.	0.23	-10.	0.	87.
28653	FCMCCL	COAL	0.	-0.234	0.	0.263	0.33	101.	173.	13.	261.	445.	43.	1.00	-5.	42.	38.
28653	FCSTCL	COAL	0.	-0.024	0.	0.029	0.08	8.	13.	1.	25.	42.	4.	0.21	-9.	0.	85.
28653	FCSTCL	COAL	0.	-0.307	0.	0.376	0.39	101.	173.	13.	321.	547.	53.	1.00	1.	59.	34.
28653	IGGTST	COAL	0.	-0.030	0.	0.022	0.07	-11.	-18.	1.	6.	11.	4.	0.06	-9.	0.	84.
28653	IGGTST	COAL	0.	-0.266	0.	0.197	0.26	-93.	-159.	12.	56.	94.	39.	0.26	-1.	39.	35.
28653	GTSOAR	RESIDU	-0.321	0.289	-0.321	0.342	0.06	58.	53.	12.	75.	81.	15.	0.51	11.	0.	-14.
28653	GTSOAR	RESIDU	-0.643	0.289	-0.643	0.872	0.26	-59.	-68.	9.	128.	250.	44.	0.51	46.	50.	24.
28653	GTAC08	RESIDU	0.	-0.024	0.	0.028	0.08	-24.	48.	-3.	-10.	67.	-12.	0.13	12.	0.	-21.
28653	GTAC08	RESIDU	0.	-0.188	0.	0.215	0.31	-185.	-17.	-22.	-59.	189.	-17.	0.17	37.	33.	15.
28653	GTAC12	RESIDU	0.	-0.025	0.	0.027	0.08	-23.	48.	-3.	-8.	67.	-12.	0.14	12.	0.	-21.
28653	GTAC12	SIDU	0.	-0.241	0.	0.265	0.33	-217.	-39.	-26.	-58.	222.	-17.	0.19	43.	43.	17.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING\$***** - - - EMISSIONS SAVING\$ - - -										CAPITL--ELECTRIC POWER---						
		ECS *****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC	SAVED		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX						PART	
28653	GTAC16	RESIDU	0.	-0.026	0.	0.026	0.08	-22.	47.	-3.	-8.	67.	-12.	0.14	11.	0.	-20.	-2.
28653	GTAC16	RESIDU	0.	-0.295	0.	0.295	0.34	-250.	-60.	-30.	-64.	245.	-19.	0.19	47.	50.	20.	-2.
28653	GTWC16	RESIDU	0.	-0.028	0.	0.025	0.07	-23.	47.	-3.	-9.	66.	-12.	0.13	11.	0.	-17.	-2.
28653	GTWC16	RESIDU	0.	-0.317	0.	0.280	0.32	-263.	-69.	-32.	-75.	239.	-21.	0.17	49.	51.	20.	-3.
28653	CC1626	RESIDU	0.	-0.029	0.	0.024	0.07	-22.	46.	-3.	-7.	66.	-12.	0.14	11.	0.	-16.	-3.
28653	CC1626	RESIDU	0.	-0.472	0.	0.395	0.34	-355.	-131.	-44.	-82.	320.	-23.	0.20	66.	76.	22.	-4.
28653	CC1622	RESIDU	0.	-0.027	0.	0.025	0.07	-21.	47.	-3.	-7.	66.	-12.	0.14	12.	0.	-18.	-2.
28653	CC1622	RESIDU	0.	-0.405	0.	0.372	0.35	-316.	-104.	-39.	-71.	300.	-20.	0.21	58.	68.	22.	-3.
28653	CC1222	RESIDU	0.	-0.027	0.	0.025	0.07	-21.	47.	-3.	-7.	66.	-12.	0.14	12.	0.	-19.	-2.
28653	CC1222	RESIDU	0.	-0.399	0.	0.373	0.35	-312.	-102.	-38.	-68.	300.	-20.	0.21	60.	67.	21.	-3.
28653	CC0822	RESIDU	0.	-0.025	0.	0.027	0.08	-21.	48.	-3.	-7.	67.	-12.	0.14	12.	0.	-19.	-2.
28653	CC0822	RESIDU	0.	-0.292	0.	0.315	0.35	-248.	-59.	-30.	-57.	256.	-17.	0.21	50.	52.	19.	-2.
28653	DEHTPM	RESIDU	0.	-0.030	0.	0.022	0.06	-48.	46.	-3.	-33.	65.	-13.	0.06	7.	0.	5.	-3.
28653	DEHTPM	RESIDU	0.	-0.281	0.	0.204	0.26	-440.	-54.	-29.	-289.	194.	-23.	0.16	12.	41.	36.	-7.
28653	GTSOAM	DISTIL	-0.316	0.289	-0.316	0.342	0.07	83.	122.	14.	98.	141.	5.	0.72	12.	0.	-17.	-5.
28653	GTSOAM	DISTIL	-0.543	0.289	-0.543	0.785	0.31	-7.	85.	14.	148.	340.	22.	0.68	45.	42.	21.	-6.
28653	GTRA08	DISTIL	0.	-0.032	0.	0.021	0.06	19.	83.	9.	36.	112.	12.	0.47	11.	0.	-9.	-5.
28653	GTRA08	DISTIL	0.	-0.608	0.	0.393	0.30	-258.	-79.	-1.	64.	469.	58.	0.49	69.	89.	31.	-14.
28653	GTRA12	DISTIL	0.	-0.031	0.	0.022	0.06	20.	84.	9.	37.	112.	12.	0.48	11.	0.	-10.	-5.
28653	GTRA12	DISTIL	0.	-0.546	0.	0.389	0.32	-233.	-61.	0.	68.	449.	56.	0.50	66.	83.	30.	-12.
28653	GTRA16	DISTIL	0.	-0.030	0.	0.022	0.07	20.	84.	9.	37.	112.	12.	0.48	11.	0.	-9.	-5.
28653	GTRA16	DISTIL	0.	-0.483	0.	0.359	0.32	-208.	-44.	1.	63.	417.	51.	0.50	58.	74.	30.	-11.
28653	GTR208	DISTIL	0.	-0.030	0.	0.023	0.07	19.	84.	9.	36.	113.	12.	0.47	11.	0.	-12.	-5.
28653	GTR208	DISTIL	0.	-0.375	0.	0.289	0.30	-165.	-13.	3.	49.	350.	43.	0.49	52.	57.	27.	-9.
28653	GTR212	DISTIL	0.	-0.030	0.	0.023	0.07	19.	84.	9.	36.	113.	12.	0.48	11.	0.	-11.	-5.
28653	GTR212	DISTIL	0.	-0.403	0.	0.311	0.31	-176.	-21.	3.	54.	369.	45.	0.49	54.	62.	28.	-10.
28653	GTR216	DISTIL	0.	-0.029	0.	0.023	0.07	20.	84.	9.	36.	113.	12.	0.48	11.	0.	-11.	-5.
28653	GTR216	DISTIL	0.	-0.410	0.	0.327	0.32	-179.	-23.	3.	58.	380.	46.	0.50	53.	64.	28.	-10.
28653	GTRV08	DISTIL	0.	-0.035	0.	0.018	0.05	19.	82.	9.	35.	111.	12.	0.47	11.	0.	-6.	-5.
28653	GTRV08	DISTIL	0.	-0.772	0.	0.392	0.27	-323.	-125.	-4.	51.	511.	65.	0.46	85.	104.	33.	-18.
28653	GTRV12	DISTIL	0.	-0.033	0.	0.020	0.06	19.	83.	9.	36.	112.	12.	0.47	11.	0.	-7.	-5.
28653	GTRV12	DISTIL	0.	-0.709	0.	0.427	0.30	-298.	-107.	-3.	67.	514.	65.	0.48	83.	102.	31.	-15.
28653	GTRV16	DISTIL	0.	-0.032	0.	0.020	0.06	19.	83.	9.	36.	112.	12.	0.47	11.	0.	-7.	-5.
28653	GTRV16	DISTIL	0.	-0.619	0.	0.394	0.30	-262.	-82.	-1.	64.	472.	59.	0.48	73.	90.	30.	-14.
28653	GTR308	DISTIL	0.	-0.036	0.	0.016	0.05	17.	82.	9.	34.	111.	12.	0.46	11.	0.	-6.	-5.
28653	GTR308	DISTIL	0.	-0.594	0.	0.262	0.23	-252.	-75.	-1.	23.	393.	50.	0.43	65.	75.	33.	-15.
28653	GTR312	DISTIL	0.	-0.031	0.	0.022	0.06	19.	83.	9.	36.	112.	12.	0.47	11.	0.	-10.	-5.
28653	GTR312	DISTIL	0.	-0.491	0.	0.343	0.31	-211.	-46.	1.	57.	410.	51.	0.49	64.	73.	28.	-11.
28653	GTR316	DISTIL	0.	-0.031	0.	0.021	0.06	19.	83.	9.	36.	112.	12.	0.47	11.	0.	-9.	-5.
28653	GTR316	DISTIL	0.	-0.483	0.	0.335	0.30	-208.	-44.	1.	56.	404.	50.	0.49	62.	72.	29.	-11.
28653	FCPADS	DISTIL	0.	-0.035	0.	0.017	0.05	28.	95.	10.	45.	123.	13.	0.54	10.	0.	8.	-6.
28653	FCPADS	DISTIL	0.	-1.158	0.	0.561	0.28	-181.	174.	14.	372.	1113.	116.	0.85	64.	156.	53.	-50.
28653	FCMCDS	DISTIL	0.	-0.030	0.	0.023	0.07	7.	95.	9.	23.	124.	12.	0.47	10.	0.	3.	-6.
28653	FCMCDS	DISTIL	0.	-0.766	0.	0.593	0.36	-696.	172.	-1.	-258.	915.	79.	0.47	47.	123.	48.	-33.
28654	STM141	RESIDU	0.	-0.002	0.	0.004	0.02	-1.	40.	-0.	-0.	37.	-8.	0.14	9.	0.	-367.	-2.
28654	STM141	RESIDU	0.	-0.015	0.	0.025	0.10	-5.	35.	-1.	6.	50.	-7.	0.20	12.	3.	-44.	-1.

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FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

*****FUEL SAVING\$*****		*****EMISSIONS SAVING\$*****		*****CAPITL--ELECTRIC POWER---	
PROCS	ECS	ECS	FESR	EMSR	TOTAL
		FUEL OIL+GAS	COAL	SAVING	EXPORT
					COST
					LAEC
					SAVED
					MWH
28654	STM141	COAL-F	0.004	0.02	193.
28654	STM141	COAL-F	0.025	0.10	23.
28654	STM141	COAL-A	0.004	0.02	158.
28654	STM141	COAL-A	0.025	0.10	-9.
28654	PFBSTM	COAL-P	0.003	0.02	138.
28654	PFBSTM	COAL-P	0.062	0.20	29.
28654	TISTMT	RESIDU	0.004	0.02	-291.
28654	TISTMT	RESIDU	0.095	0.26	74.
28654	TISTMT	COAL	0.004	0.02	238.
28654	TISTMT	COAL	0.095	0.26	96.
28654	TIHRSG	RESIDU	0.002	0.01	-251.
28654	TIHRSG	RESIDU	0.042	0.13	101.
28654	TIHRSG	COAL	0.002	0.01	285.
28654	TIHRSG	COAL	0.042	0.13	127.
28654	STIRL	DISTIL	0.002	0.01	-346.
28654	STIRL	DISTIL	0.097	0.22	31.
28654	STIRL	RESIDU	0.002	0.01	-350.
28654	STIRL	RESIDU	0.097	0.22	26.
28654	STIRL	COAL	0.002	0.01	156.
28654	STIRL	COAL	0.097	0.22	39.
28654	HEGT00	COAL-A	0.001	0.00	128.
28654	HEGT00	COAL-A	0.036	0.09	58.
28654	FCMCCL	COAL	0.003	0.01	234.
28654	FCMCCL	COAL	0.186	0.33	41.
28654	FCSTCL	COAL	0.003	0.02	239.
28654	FCSTCL	COAL	0.226	0.36	39.
28654	IGGTST	COAL	0.002	0.01	221.
28654	IGGTST	COAL	0.107	0.23	42.
28654	GTSUAR	RESIDU	0.210	0.01	-384.
28654	GTSUAR	RESIDU	0.616	0.26	24.
28654	GTAC08	RESIDU	0.003	0.01	-394.
28654	GTAC08	RESIDU	0.152	0.31	14.
28654	GTAC12	RESIDU	0.003	0.01	-397.
28654	GTAC12	RESIDU	0.187	0.33	17.
28654	GTAC16	RESIDU	0.003	0.01	-396.
28654	GTAC16	RESIDU	0.208	0.34	20.
28654	GTWC16	RESIDU	0.003	0.01	-389.
28654	GTWC16	RESIDU	0.198	0.32	20.
28654	DEHTPM	RESIDU	0.002	0.01	-337.
28654	DEHTPM	RESIDU	0.144	0.26	36.
28654	GTSUAD	DISTIL	0.210	0.01	-393.
28654	GTSUAD	DISTIL	0.554	0.31	21.
28654	GTRA08	DISTIL	0.002	0.01	-379.
28654	GTRA08	DISTIL	0.278	0.30	-11.
28654	GTRA	DISTIL	0.002	0.01	-3.
28654	GTRA	DISTIL	0.275	0.32	-9.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9
REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING S***** - - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---							
		ECS *****DIRECT*****		-----TOTAL-----		FESR -----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC					
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART						NOX	SOX	PART	EXPORT	SAVED
28654	GTRA16	DISTIL	0.	-0.003	0.	0.003	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-381.	-3.	
28654	GTRA16	DISTIL	0.	-0.342	0.	0.254	0.32	-147.	-31.	1.	45.	295.	36.	0.50	42.	55.	30.	-9.	
28654	GTR208	DISTIL	0.	-0.003	0.	0.003	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-385.	-3.	
28654	GTR208	DISTIL	0.	-0.265	0.	0.204	0.30	-116.	-10.	2.	35.	247.	30.	0.49	38.	43.	27.	-7.	
28654	GTR212	DISTIL	0.	-0.003	0.	0.003	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-384.	-3.	
28654	GTR212	DISTIL	0.	-0.285	0.	0.220	0.31	-124.	-15.	2.	38.	261.	32.	0.49	39.	47.	28.	-7.	
28654	GTR216	DISTIL	0.	-0.003	0.	0.003	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-384.	-3.	
28654	GTR216	DISTIL	0.	-0.290	0.	0.231	0.32	-126.	-16.	2.	41.	268.	33.	0.50	39.	48.	28.	-7.	
28654	GTRW08	DISTIL	0.	-0.004	0.	0.002	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-376.	-3.	
28654	GTRW08	DISTIL	0.	-0.545	0.	0.277	0.27	-228.	-88.	-3.	36.	361.	46.	0.46	61.	77.	33.	-13.	
28654	GTRW12	DISTIL	0.	-0.004	0.	0.002	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-378.	-3.	
28654	GTRW12	DISTIL	0.	-0.501	0.	0.301	0.30	-211.	-76.	-2.	48.	363.	46.	0.48	60.	75.	31.	-12.	
28654	GTRW16	DISTIL	0.	-0.004	0.	0.002	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-376.	-3.	
28654	GTRW16	DISTIL	0.	-0.437	0.	0.279	0.30	-185.	-58.	-1.	45.	334.	42.	0.48	53.	67.	31.	-10.	
28654	GTR308	DISTIL	0.	-0.004	0.	0.002	0.01	23.	64.	7.	24.	67.	7.	0.47	9.	0.	-379.	-3.	
28654	GTR308	DISTIL	0.	-0.419	0.	0.185	0.23	-178.	-53.	-0.	16.	278.	35.	0.43	47.	56.	33.	-11.	
28654	GTR312	DISTIL	0.	-0.003	0.	0.002	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-381.	-3.	
28654	GTR312	DISTIL	0.	-0.347	0.	0.242	0.31	-149.	-32.	1.	41.	290.	36.	0.49	47.	55.	29.	-8.	
28654	GTR316	DISTIL	0.	-0.003	0.	0.002	0.01	23.	64.	7.	25.	67.	7.	0.47	9.	0.	-378.	-3.	
28654	GTR316	DISTIL	0.	-0.341	0.	0.237	0.30	-147.	-31.	1.	39.	285.	35.	0.49	45.	54.	29.	-8.	
28654	FCPADS	DISTIL	0.	-0.004	0.	0.002	0.01	24.	65.	7.	26.	69.	7.	0.48	8.	0.	-345.	-3.	
28654	FCPADS	DISTIL	0.	-0.818	0.	0.396	0.28	-128.	123.	10.	263.	787.	82.	0.85	48.	113.	53.	-36.	
28654	FCMCDS	DISTIL	0.	-0.003	0.	0.003	0.01	21.	65.	7.	23.	69.	7.	0.47	8.	0.	-350.	-3.	
28654	FCMCDS	DISTIL	0.	-0.541	0.	0.419	0.36	-492.	122.	-1.	-183.	647.	56.	0.47	36.	90.	48.	-24.	
28691	PFBSTM	COAL-P	0.	0.	0.	0.013	1.00	0.	0.	0.	4.	7.	1.	1.00	-3.	0.	105.	-0.	
28691	PFBSTM	COAL-P	0.	0.	0.	0.051	1.00	0.	0.	0.	16.	28.	3.	1.00	1.	4.	26.	0.	
28691	TIHRSG	COAL	0.	0.	0.	0.013	1.00	0.	0.	0.	4.	7.	1.	1.00	-10.	0.	242.	-1.	
28691	TIHRSG	COAL	0.	0.	0.	0.083	1.00	0.	0.	0.	27.	45.	5.	1.00	-34.	7.	127.	-4.	
28691	HEGT00	COAL-A	0.	0.	0.	0.013	1.00	0.	0.	0.	4.	7.	1.	1.00	-4.	0.	113.	-0.	
28691	HEGT00	COAL-A	0.	0.	0.	0.128	1.00	0.	0.	0.	41.	70.	8.	1.00	-11.	11.	47.	-0.	
28691	GTAC16	RESIDU	0.	-0.012	0.	0.000	0.01	-4.	-5.	-1.	-0.	2.	-0.	0.06	7.	0.	-89.	1.	
28691	GTRA08	DISTIL	0.	-0.011	0.	0.001	0.10	-3.	-3.	-0.	1.	4.	1.	0.49	6.	0.	-79.	1.	
28691	GTRA12	DISTIL	0.	-0.011	0.	0.001	0.11	-3.	-3.	-0.	1.	4.	1.	0.49	6.	0.	-80.	1.	
28691	GTRA16	DISTIL	0.	-0.012	0.	0.001	0.08	-3.	-3.	-0.	1.	4.	1.	0.48	6.	0.	-77.	1.	
28691	GTR212	DISTIL	0.	-0.012	0.	0.000	0.03	-3.	-3.	-0.	1.	3.	1.	0.45	6.	0.	-77.	1.	
28691	GTR216	DISTIL	0.	-0.012	0.	0.001	0.05	-3.	-3.	-0.	1.	4.	1.	0.46	6.	0.	-77.	1.	
28691	GTRW08	DISTIL	0.	-0.011	0.	0.001	0.09	-3.	-3.	-0.	1.	4.	1.	0.48	6.	0.	-77.	1.	
28691	GTRW12	DISTIL	0.	-0.011	0.	0.002	0.12	-3.	-3.	-0.	2.	4.	1.	0.50	6.	0.	-78.	1.	
28691	GTRW16	DISTIL	0.	-0.011	0.	0.001	0.10	-3.	-3.	-0.	1.	4.	1.	0.49	6.	0.	-75.	1.	
28691	GTR312	DISTIL	0.	-0.012	0.	0.001	0.06	-3.	-3.	-0.	1.	4.	1.	0.47	6.	0.	-77.	1.	
28691	GTR316	DISTIL	0.	-0.012	0.	0.001	0.06	-3.	-3.	-0.	1.	4.	1.	0.46	6.	0.	-75.	1.	
28691	FCPADS	DISTIL	0.	-0.011	0.	0.002	0.16	-2.	-3.	-0.	2.	4.	1.	0.52	6.	0.	-71.	1.	
28691	FCMCDS	DISTIL	0.	-0.010	0.	0.003	0.22	-2.	-3.	-0.	2.	4.	1.	0.56	6.	0.	-74.	1.	
28692	PFBSTM	COAL-P	0.	-0.018	0.	0.022	0.12	37.	-11.	5.	50.	11.	7.	0.37	1.	0.	39.	0.	
28692	TIHRSG	RESIDU	0.	-0.039	0.	0.009	0.05	-14.	12.	-2.	0.	33.	-6.	0.15	-13.	0.	118.	-4.	
28692	TIHRSG	RESIDU	0.	-0.079	0.	0.017	0.07	-28.	-4.	-4.	2.	42.	-7.	0.16	-24.	4.	113.	-6.	

HONEYWELL PAGE PRINTING SYSTEM- PL100-03

DATE 06/12/79

ISE PEG AES

GENERAL ELECTRIC COMPANY

PAGE 46

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING \$****- - - EMISSIONS SAVING \$ - - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****		-----TOTAL-----		FESR		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART								
28692	TIHRSO	COAL	0.	-0.039	0.	0.009	0.05	-14.	-24.	-2.	2.	3.	1.	0.03	-26.	0.	182.	-3.
28692	TIHRSO	COAL	0.	-0.079	0.	0.017	0.07	-28.	-47.	-4.	3.	5.	2.	0.05	-38.	4.	140.	-5.
28692	HEGT00	COAL-A	0.	-0.041	0.	0.007	0.04	20.	-25.	-2.	36.	1.	1.	0.21	-9.	0.	95.	-1.
28692	HEGT00	COAL-A	0.	-0.126	0.	0.020	0.07	1.	-76.	-6.	48.	4.	2.	0.20	-12.	9.	63.	-2.
28692	FCMCCL	COAL	0.	-0.023	0.	0.025	0.13	10.	17.	1.	25.	43.	4.	0.39	-8.	0.	84.	-1.
28692	FCMCCL	COAL	0.	-0.114	0.	0.127	0.33	49.	84.	6.	126.	215.	21.	1.00	-8.	18.	44.	-1.
28692	GTSOAR	RESIDU	-0.171	0.139	-0.171	0.187	0.09	23.	19.	6.	38.	45.	8.	0.50	8.	0.	2.	-1.
28692	GTSOAR	RESIDU	-0.350	0.139	-0.350	0.457	0.23	-39.	-48.	4.	63.	125.	23.	0.49	25.	25.	26.	-3.
28692	GTAC08	RESIDU	0.	-0.023	0.	0.025	0.14	-22.	19.	-3.	-8.	40.	-6.	0.14	9.	0.	-9.	-1.
28692	GTAC08	RESIDU	0.	-0.092	0.	0.103	0.31	-90.	-9.	-11.	-29.	91.	-8.	0.17	20.	14.	14.	-0.
28692	GTAC12	RESIDU	0.	-0.023	0.	0.025	0.14	-20.	19.	-2.	-6.	40.	-6.	0.15	9.	0.	-9.	-1.
28692	GTAC12	RESIDU	0.	-0.113	0.	0.128	0.34	-103.	-17.	-12.	-27.	107.	-8.	0.20	22.	18.	16.	-0.
28692	GTAC16	RESIDU	0.	-0.024	0.	0.024	0.13	-20.	18.	-2.	-6.	39.	-6.	0.15	9.	0.	-6.	-1.
28692	GTAC16	RESIDU	0.	-0.146	0.	0.142	0.33	-123.	-31.	-15.	-32.	118.	-9.	0.19	24.	23.	-20.	-1.
28692	GTWC16	RESIDU	0.	-0.025	0.	0.023	0.12	-21.	18.	-3.	-7.	39.	-6.	0.14	8.	0.	-4.	-1.
28692	GTWC16	RESIDU	0.	-0.152	0.	0.135	0.32	-126.	-33.	-15.	-36.	115.	-10.	0.17	24.	22.	20.	-1.
28692	GTSOAR	DISTIL	-0.164	0.139	-0.164	0.187	0.13	35.	57.	7.	50.	78.	3.	0.71	9.	0.	-5.	-2.
28692	GTSOAR	DISTIL	-0.260	0.139	-0.260	0.377	0.31	-3.	41.	7.	71.	163.	11.	0.68	23.	18.	20.	-3.
28692	GTRA08	DISTIL	0.	-0.033	0.	0.015	0.08	2.	35.	4.	17.	61.	7.	0.47	8.	0.	8.	-2.
28692	GTRA08	DISTIL	0.	-0.446	0.	0.207	0.26	-185.	-81.	-3.	25.	276.	36.	0.45	45.	57.	35.	-10.
28692	GTRA12	DISTIL	0.	-0.031	0.	0.017	0.09	2.	36.	4.	18.	62.	7.	0.47	8.	0.	7.	-2.
28692	GTRA12	DISTIL	0.	-0.362	0.	0.199	0.28	-152.	-58.	-2.	29.	249.	32.	0.47	39.	48.	34.	-8.
28692	GTRA16	DISTIL	0.	-0.030	0.	0.018	0.10	2.	36.	4.	18.	62.	7.	0.47	8.	0.	7.	-2.
28692	GTRA16	DISTIL	0.	-0.300	0.	0.179	0.29	-127.	-40.	-1.	27.	222.	28.	0.47	33.	40.	33.	-7.
28692	GTR208	DISTIL	0.	-0.029	0.	0.019	0.10	2.	36.	4.	17.	63.	7.	0.47	8.	0.	3.	-2.
28692	GTR208	DISTIL	0.	-0.211	0.	0.139	0.28	-91.	-15.	1.	21.	177.	22.	0.47	28.	28.	29.	-5.
28692	GTR212	DISTIL	0.	-0.029	0.	0.019	0.10	2.	36.	4.	18.	63.	7.	0.47	8.	0.	4.	-2.
28692	GTR212	DISTIL	0.	-0.228	0.	0.151	0.29	-98.	-20.	1.	24.	187.	23.	0.48	29.	31.	30.	-5.
28692	GTR216	DISTIL	0.	-0.029	0.	0.019	0.10	2.	36.	4.	18.	63.	7.	0.48	8.	0.	5.	-2.
28692	GTR216	DISTIL	0.	-0.235	0.	0.159	0.30	-101.	-22.	1.	26.	194.	24.	0.48	29.	32.	30.	-5.
28692	GTRW08	DISTIL	0.	-0.035	0.	0.014	0.07	1.	35.	4.	17.	61.	7.	0.46	8.	0.	10.	-2.
28692	GTRW08	DISTIL	0.	-0.520	0.	0.203	0.24	-215.	-102.	-4.	18.	293.	39.	0.43	51.	63.	36.	-12.
28692	GTRW12	DISTIL	0.	-0.032	0.	0.016	0.09	2.	35.	4.	18.	62.	7.	0.47	8.	0.	8.	-2.
28692	GTRW12	DISTIL	0.	-0.439	0.	0.219	0.27	-183.	-79.	-3.	29.	281.	36.	0.46	47.	57.	34.	-10.
28692	GTRW16	DISTIL	0.	-0.031	0.	0.017	0.09	2.	36.	4.	18.	62.	7.	0.47	8.	0.	8.	-2.
28692	GTRW16	DISTIL	0.	-0.357	0.	0.197	0.28	-150.	-56.	-1.	28.	247.	31.	0.47	39.	47.	33.	-8.
28692	GTR308	DISTIL	0.	-0.035	0.	0.013	0.07	0.	34.	4.	16.	61.	7.	0.45	8.	0.	9.	-2.
28692	GTR308	DISTIL	0.	-0.351	0.	0.124	0.20	-148.	-55.	-1.	5.	206.	27.	0.41	36.	40.	36.	-9.
28692	GTR312	DISTIL	0.	-0.029	0.	0.019	0.10	2.	36.	4.	18.	63.	7.	0.47	8.	0.	4.	-2.
28692	GTR312	DISTIL	0.	-0.254	0.	0.166	0.30	-108.	-27.	0.	27.	203.	25.	0.48	33.	35.	30.	-6.
28692	GTR316	DISTIL	0.	-0.029	0.	0.019	0.10	2.	36.	4.	18.	62.	7.	0.47	8.	0.	6.	-2.
28692	GTR316	DISTIL	0.	-0.249	0.	0.162	0.30	-106.	-26.	0.	26.	199.	25.	0.48	31.	34.	30.	-6.
28692	FCPADS	DISTIL	0.	-0.032	0.	0.016	0.08	11.	47.	5.	26.	73.	8.	0.58	8.	0.	19.	-3.
28692	FCPADS	DISTIL	0.	-0.558	0.	0.270	0.28	-87.	84.	7.	179.	536.	56.	0.85	34.	73.	5.	-24.
28692	FCMCCL	DISTIL	0.	-0.027	0.	0.021	0.11	-9.		4.	6.	73.	7.	0.47	8.	0.		-3.
28692	FCMCCL	DISTIL	0.	-0.369	0.	0.286	0.36	-335.		-1.	-125.	441.	38.	0.47	25.	57.	40.	-16.

DATE 06/12/79
ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 47

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING S*****- - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		****DIRECT****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
28693	STM141	RESIDU	0.	-0.011	0.	0.019	0.06	-4.	54.	-1.	3.	61.	-11.	0.17	12.	0.	-69.	-2.
28693	STM141	RESIDU	0.	-0.059	0.	0.098	0.22	-21.	35.	-3.	27.	110.	-8.	0.30	22.	12.	-1.	-1.
28693	STM141	COAL-F	0.	-0.011	0.	0.019	0.06	-4.	-7.	-1.	6.	10.	1.	0.05	-3.	0.	71.	-0.
28693	STM141	COAL-F	0.	-0.059	0.	0.098	0.22	-21.	-35.	-3.	30.	50.	6.	0.20	9.	12.	19.	2.
28693	STM141	COAL-A	0.	-0.011	0.	0.019	0.06	61.	-7.	-1.	71.	10.	1.	0.26	-1.	0.	55.	-0.
28693	STM141	COAL-A	0.	-0.059	0.	0.098	0.22	55.	-35.	-3.	105.	50.	6.	0.37	17.	12.	6.	3.
28693	STM088	RESIDU	0.	-0.011	0.	0.019	0.06	-4.	54.	-1.	3.	61.	-11.	0.17	13.	0.	-60.	-2.
28693	STM088	RESIDU	0.	-0.041	0.	0.068	0.17	-14.	42.	-2.	18.	92.	-9.	0.26	19.	7.	-10.	-2.
28693	STM088	COAL-F	0.	-0.011	0.	0.019	0.06	-4.	-7.	-1.	6.	10.	1.	0.05	-3.	0.	73.	-0.
28693	STM088	COAL-F	0.	-0.041	0.	0.068	0.17	-14.	-25.	-2.	21.	35.	4.	0.15	6.	7.	19.	1.
28693	STM088	COAL-A	0.	-0.011	0.	0.019	0.06	61.	-7.	-1.	71.	10.	1.	0.26	-1.	0.	55.	-0.
28693	STM088	COAL-A	0.	-0.041	0.	0.068	0.17	57.	-25.	-2.	93.	33.	4.	0.34	14.	7.	2.	2.
28693	PFBSTM	COAL-P	0.	-0.012	0.	0.018	0.06	62.	-7.	-0.	72.	9.	2.	0.26	-2.	0.	65.	-0.
28693	PFBSTM	COAL-P	0.	-0.105	0.	0.162	0.29	73.	-63.	9.	158.	83.	24.	0.49	13.	22.	23.	1.
28693	TISTMT	RESIDU	0.	-0.012	0.	0.019	0.06	-4.	54.	-1.	3.	61.	-11.	0.17	1.	0.	24.	-4.
28693	TISTMT	RESIDU	0.	-0.126	0.	0.199	0.32	-44.	8.	-6.	57.	173.	-4.	0.38	-28.	28.	58.	-9.
28693	TISTMT	COAL	0.	-0.012	0.	0.019	0.06	-4.	-7.	-1.	6.	10.	1.	0.05	-11.	0.	137.	-1.
28693	TISTMT	COAL	0.	-0.140	0.	0.221	0.34	-49.	-84.	-7.	67.	113.	14.	0.31	-52.	31.	69.	-6.
28693	TIHRSG	RESIDU	0.	-0.017	0.	0.014	0.04	-6.	52.	-1.	2.	59.	-11.	0.15	-2.	0.	49.	-4.
28693	TIHRSG	RESIDU	0.	-0.093	0.	0.077	0.17	-32.	22.	-5.	19.	103.	-10.	0.25	-34.	13.	91.	-10.
28693	TIHRSG	COAL	0.	-0.017	0.	0.014	0.04	-6.	-10.	-1.	4.	7.	1.	0.04	-18.	0.	195.	-2.
28693	TIHRSG	COAL	0.	-0.103	0.	0.085	0.18	-36.	-62.	-5.	25.	41.	6.	0.15	-58.	15.	113.	-8.
28693	STIRL	DISTIL	0.	-0.017	0.	0.013	0.04	31.	88.	9.	41.	105.	11.	0.49	7.	0.	-24.	-6.
28693	STIRL	DISTIL	0.	-0.229	0.	0.182	0.26	-17.	29.	6.	115.	253.	30.	0.59	24.	36.	32.	-9.
28693	STIRL	RESIDU	0.	-0.017	0.	0.013	0.04	-6.	52.	-1.	2.	59.	-12.	0.15	7.	0.	-28.	-3.
28693	STIRL	RESIDU	0.	-0.229	0.	0.182	0.26	-80.	-33.	-24.	48.	176.	-21.	0.30	24.	36.	28.	-5.
28693	STIRL	COAL	0.	-0.017	0.	0.013	0.04	-6.	-10.	-1.	4.	6.	1.	0.04	-3.	0.	71.	-0.
28693	STIRL	COAL	0.	-0.254	0.	0.202	0.27	-89.	-153.	-13.	58.	97.	14.	0.24	-3.	40.	37.	-1.
28693	HEGT85	COAL-A	0.	-0.026	0.	0.004	0.01	59.	-16.	-1.	69.	1.	0.	0.22	-7.	0.	106.	-1.
28693	HEGT85	COAL-A	0.	-2.013	0.	0.333	0.13	-316.	-1208.	-101.	439.	75.	38.	0.22	-24.	217.	45.	-27.
28693	HEGT60	COAL-A	0.	-0.025	0.	0.006	0.02	59.	-15.	-1.	69.	2.	1.	0.22	-7.	0.	102.	-1.
28693	HEGT60	COAL-A	0.	-0.626	0.	0.144	0.14	-64.	-376.	-31.	183.	45.	14.	0.24	-25.	69.	50.	-10.
28693	HEGT00	COAL-A	0.	-0.023	0.	0.007	0.02	59.	-14.	-1.	68.	3.	1.	0.22	-6.	0.	99.	-1.
28693	HEGT00	COAL-A	0.	-0.241	0.	0.071	0.12	6.	-144.	-12.	106.	26.	6.	0.24	-14.	26.	52.	-4.
28693	FCMCCL	COAL	0.	-0.291	0.	0.264	0.31	102.	175.	13.	281.	479.	46.	1.00	-4.	49.	39.	-3.
28693	FCSTCL	COAL	0.	-0.394	0.	0.414	0.38	102.	175.	13.	362.	617.	61.	1.00	5.	73.	35.	-2.
28693	IGGTST	COAL	0.	-0.347	0.	0.209	0.25	-122.	-208.	11.	57.	96.	44.	0.24	3.	49.	35.	-2.
28693	GTSCAR	RESIDU	-0.310	0.293	-0.310	0.323	0.04	68.	59.	12.	78.	76.	14.	0.52	8.	0.	-37.	-3.
28693	GTSCAR	RESIDU	-0.587	0.293	-0.587	0.825	0.29	-40.	-45.	10.	131.	246.	41.	0.53	45.	47.	21.	-4.
28693	GTAC08	RESIDU	0.	-0.014	0.	0.016	0.05	-6.	53.	-1.	2.	60.	-11.	0.16	9.	0.	-43.	-3.
28693	GTAC08	RESIDU	0.	-0.191	0.	0.217	0.31	-180.	-18.	-21.	-52.	191.	-17.	0.18	39.	35.	15.	-2.
28693	GTAC12	RESIDU	0.	-0.014	0.	0.016	0.05	-5.	53.	-1.	2.	60.	-11.	0.16	9.	0.	-44.	-3.
28693	GTAC12	RESIDU	0.	-0.243	0.	0.268	0.33	-211.	-39.	-26.	-51.	225.	-17.	0.20	45.	45.	18.	-2.
28693	GTAC16	RESIDU	0.	-0.015	0.	0.016	0.05	-5.	53.	-1.	2.	60.	-11.	0.16	9.	0.	-42.	-3.
28693	GTAC16	RESIDU	0.	-0.283	0.	0.298	0.34	-235.	-55.	-29.	-52.	246.	-17.	0.21	48.	52.	20.	-2.
28693	GTWC16	RESIDU	0.	-0.016	0.	0.014	0.04	-6.	52.	-1.	2.	59.	-11.	0.16	8.	0.	-38.	-3.

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FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
EMISSION UNITS= TIME 1990 LEVEL ALL
COST = \$*10**9 TYPE MATCH=HEAT

		*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---								
PROCS	ECS	ECS	*****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	*****	*****	EMSR	SAVING	TOTAL	COST	LAEC				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED				
28693	GTWC16	RESIDU	0.	-0.322	0.	0.283	0.32	-258.	-70.	-32.	-68.	242.	-20.	0.18	51.	54.	21.	-3.
28693	CC1626	RESIDU	0.	-0.016	0.	0.014	0.04	-6.	52.	-1.	2.	59.	-11.	0.15	9.	0.	-38.	-3.
28693	CC1626	RESIDU	0.	-0.497	0.	0.422	0.35	-363.	-140.	-45.	-73.	339.	-22.	0.21	72.	83.	23.	-4.
28693	CC1622	RESIDU	0.	-0.016	0.	0.015	0.05	-5.	52.	-1.	2.	60.	-11.	0.16	9.	0.	-40.	-3.
28693	CC1622	RESIDU	0.	-0.428	0.	0.398	0.36	-322.	-112.	-40.	-61.	318.	-20.	0.22	64.	75.	22.	-4.
28693	CC1222	RESIDU	0.	-0.016	0.	0.015	0.05	-5.	52.	-1.	2.	60.	-11.	0.16	9.	0.	-42.	-3.
28693	CC1222	RESIDU	0.	-0.421	0.	0.400	0.36	-318.	-110.	-39.	-59.	318.	-19.	0.23	65.	74.	22.	-3.
28693	CC0822	RESIDU	0.	-0.014	0.	0.016	0.05	-5.	53.	-1.	2.	60.	-11.	0.16	9.	0.	-41.	-3.
28693	CC0822	RESIDU	0.	-0.311	0.	0.339	0.36	-251.	-66.	-31.	-47.	272.	-16.	0.23	55.	58.	19.	-2.
28693	STIG15	RESIDU	0.	-0.025	0.	0.005	0.02	-9.	49.	-1.	-1.	56.	-12.	0.13	9.	0.	-30.	-3.
28693	STIG15	RESIDU	0.	-18.850	0.	3.942	0.17	-11375.	-7481.	-560.	-4186.	4409.	23.	0.01	1516.	2135.	37.	-303.
28693	STIG10	RESIDU	0.	-0.023	0.	0.008	0.02	-8.	49.	-1.	-1.	57.	-12.	0.14	9.	0.	-34.	-3.
28693	STIG10	RESIDU	0.	-1.585	0.	0.522	0.22	-1016.	-576.	-42.	-352.	521.	7.	0.08	147.	195.	33.	-24.
28693	STIG1S	RESIDU	0.	-0.022	0.	0.009	0.03	-8.	50.	-1.	-0.	57.	-12.	0.14	9.	0.	-36.	-3.
28693	STIG1S	RESIDU	0.	-0.888	0.	0.349	0.23	-598.	-297.	-21.	-209.	344.	5.	0.10	93.	113.	31.	-13.
28693	DEADV3	RESIDU	0.	-0.020	0.	0.010	0.03	-7.	51.	-1.	0.	58.	-12.	0.15	6.	0.	-10.	-3.
28693	DEADV3	RESIDU	0.	-0.921	0.	0.486	0.29	-1031.	-310.	-77.	-588.	423.	-43.	-0.13	45.	129.	39.	-19.
28693	DEHTPM	RESIDU	0.	-0.015	0.	0.016	0.05	-5.	53.	-1.	2.	60.	-11.	0.16	5.	0.	-13.	-3.
28693	DEHTPM	RESIDU	0.	-0.288	0.	0.305	0.34	-430.	-57.	-29.	-243.	251.	-17.	-0.01	22.	53.	31.	-6.
28693	DES0A3	DISTIL	-0.314	0.293	-0.314	0.323	0.03	95.	125.	15.	102.	132.	4.	0.74	7.	0.	-10.	-6.
28693	DES0A3	DISTIL	-1.455	0.293	-1.455	1.935	0.25	-2602.	-61.	15.	-2085.	793.	54.	-0.68	19.	151.	51.	-41.
28693	DES0A3	RESIDU	-0.314	0.293	-0.314	0.323	0.03	68.	57.	12.	78.	74.	14.	0.52	7.	0.	-16.	-3.
28693	DES0A3	RESIDU	-1.455	0.293	-1.455	1.935	0.25	-5664.	-372.	3.	-5136.	526.	100.	-2.48	19.	151.	46.	-29.
28693	GTSOAD	DISTIL	-0.308	0.293	-0.308	0.323	0.05	95.	126.	15.	102.	133.	4.	0.75	9.	0.	-40.	-5.
28693	GTSOAD	DISTIL	-0.540	0.293	-0.540	0.786	0.31	0.	80.	15.	155.	341.	22.	0.69	46.	43.	21.	-7.
28693	GTRA08	DISTIL	0.	-0.016	0.	0.014	0.04	31.	89.	9.	41.	105.	11.	0.49	8.	0.	-32.	-5.
28693	GTRA08	DISTIL	0.	-0.447	0.	0.378	0.34	-188.	-33.	2.	78.	419.	51.	0.52	60.	75.	28.	-11.
28693	GTRA12	DISTIL	0.	-0.016	0.	0.014	0.04	31.	89.	9.	41.	105.	11.	0.49	8.	0.	-33.	-5.
28693	GTRA12	DISTIL	0.	-0.426	0.	0.378	0.34	-180.	-27.	2.	79.	413.	50.	0.52	60.	73.	27.	-10.
28693	GTRA16	DISTIL	0.	-0.016	0.	0.014	0.04	31.	89.	9.	41.	105.	11.	0.49	8.	0.	-32.	-5.
28693	GTRA16	DISTIL	0.	-0.394	0.	0.355	0.34	-167.	-18.	3.	74.	392.	47.	0.52	55.	67.	28.	-10.
28693	GTR208	DISTIL	0.	-0.016	0.	0.014	0.04	31.	89.	9.	41.	105.	11.	0.49	8.	0.	-35.	-5.
28693	GTR208	DISTIL	0.	-0.326	0.	0.293	0.32	-140.	1.	4.	60.	340.	41.	0.51	51.	55.	25.	-8.
28693	GTR212	DISTIL	0.	-0.016	0.	0.014	0.04	31.	89.	9.	41.	105.	11.	0.49	8.	0.	-34.	-5.
28693	GTR212	DISTIL	0.	-0.351	0.	0.313	0.33	-149.	-6.	4.	64.	357.	43.	0.51	53.	59.	26.	-9.
28693	GTR216	DISTIL	0.	-0.016	0.	0.015	0.05	32.	89.	9.	41.	105.	11.	0.49	8.	0.	-34.	-5.
28693	GTR216	DISTIL	0.	-0.354	0.	0.327	0.34	-151.	-6.	4.	68.	366.	44.	0.52	52.	61.	26.	-9.
28693	GTRW08	DISTIL	0.	-0.019	0.	0.012	0.04	31.	88.	9.	41.	105.	11.	0.49	8.	0.	-28.	-6.
28693	GTRW08	DISTIL	0.	-0.604	0.	0.380	0.30	-251.	-77.	-1.	66.	461.	58.	0.48	76.	89.	31.	-14.
28693	GTRW12	DISTIL	0.	-0.018	0.	0.013	0.04	31.	88.	9.	41.	105.	11.	0.49	8.	0.	-30.	-6.
28693	GTRW12	DISTIL	0.	-0.585	0.	0.413	0.32	-243.	-71.	-0.	78.	475.	59.	0.50	77.	91.	29.	-13.
28693	GTRW16	DISTIL	0.	-0.018	0.	0.013	0.04	31.	88.	9.	41.	105.	11.	0.49	8.	0.	-29.	-6.
28693	GTRW16	DISTIL	0.	-0.535	0.	0.388	0.32	-223.	-57.	1.	74.	448.	55.	0.50	70.	84.	29.	-12.
28693	GTR308	DISTIL	0.	-0.019	0.	0.011	0.03	31.	88.	9.	40.	104.	11.	0.49	8.	0.	-28.	-6.
28693	GTR308	DISTIL	0.	-0.483	0.	0.269	0.26	-202.	-	1.	39.	368.	46.	0.46	60.	68.	-	-13.
28693	GTRC	DISTIL	0.	-0.017	0.	0.013	0.04	31.	-	9.	41.	105.	11.	0.49	8.	0.	-32.	-5.

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FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---			
		ECS	DIRECT	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	MWH
28693	GTR312	DISTIL	0.	-0.458	0.	0.344	0.31	-192.	-36.	2.	66.	403.	49. 0.50
28693	GTR316	DISTIL	0.	-0.017	0.	0.013	0.04	31.	88.	9.	41.	105.	11. 0.49
28693	GTR316	DISTIL	0.	-0.453	0.	0.337	0.31	-190.	-34.	2.	64.	398.	49. 0.50
28693	FCPADS	DISTIL	0.	-0.020	0.	0.010	0.03	30.	87.	9.	40.	104.	11. 0.48
28693	FCPADS	DISTIL	0.	-1.171	0.	0.567	0.28	-184.	167.	14.	375.	1117.	117. 0.84
28693	FCMCDS	DISTIL	0.	-0.017	0.	0.013	0.04	31.	88.	9.	41.	105.	11. 0.49
28693	FCMCDS	DISTIL	0.	-0.775	0.	0.600	0.36	-687.	165.	-1.	-244.	917.	80. 0.48
28694	STM141	RESIDU	0.	-0.010	0.	0.017	0.05	-4.	59.	-1.	3.	64.	-12. 0.16
28694	STM141	RESIDU	0.	-0.037	0.	0.060	0.15	-13.	49.	-2.	16.	91.	-10. 0.24
28694	STM141	COAL-F	0.	-0.010	0.	0.017	0.05	-4.	-6.	-1.	5.	9.	1. 0.04
28694	STM141	COAL-F	0.	-0.037	0.	0.060	0.15	-13.	-22.	-2.	18.	31.	4. 0.13
28694	STM141	COAL-A	0.	-0.010	0.	0.017	0.05	67.	-6.	-1.	75.	9.	1. 0.25
28694	STM141	COAL-A	0.	-0.037	0.	0.060	0.15	63.	-22.	-2.	94.	31.	4. 0.32
28694	PFBSTM	COAL-P	0.	-0.011	0.	0.016	0.05	67.	-7.	-0.	76.	8.	1. 0.25
28694	PFBSTM	COAL-P	0.	-0.088	0.	0.129	0.24	80.	-53.	10.	150.	66.	23. 0.46
28694	TISTMT	RESIDU	0.	-0.011	0.	0.017	0.05	-4.	59.	-1.	3.	64.	-12. 0.16
28694	TISTMT	RESIDU	0.	-0.103	0.	0.162	0.28	-36.	22.	-5.	46.	154.	-6. 0.35
28694	TISTMT	COAL	0.	-0.011	0.	0.017	0.05	-4.	-6.	-1.	5.	9.	1. 0.04
28694	TISTMT	COAL	0.	-0.122	0.	0.191	0.30	-43.	-73.	-6.	58.	98.	12. 0.28
28694	TIHRSG	RESIDU	0.	-0.018	0.	0.010	0.03	-6.	56.	-1.	0.	61.	-13. 0.14
28694	TIHRSG	RESIDU	0.	-0.124	0.	0.069	0.14	-43.	14.	-6.	16.	106.	-12. 0.22
28694	TIHRSG	COAL	0.	-0.018	0.	0.010	0.03	-6.	-11.	-1.	3.	5.	1. 0.02
28694	TIHRSG	COAL	0.	-0.146	0.	0.082	0.15	-51.	-86.	-7.	22.	37.	6. 0.12
28694	STIRL	DISTIL	0.	-0.016	0.	0.012	0.03	34.	96.	10.	43.	111.	12. 0.49
28694	STIRL	DISTIL	0.	-0.220	0.	0.161	0.23	-13.	39.	7.	110.	247.	29. 0.58
28694	STIRL	RESIDU	0.	-0.016	0.	0.012	0.03	-6.	57.	-1.	1.	62.	-12. 0.15
28694	STIRL	RESIDU	0.	-0.220	0.	0.161	0.23	-77.	-25.	-24.	42.	167.	-23. 0.28
28694	STIRL	COAL	0.	-0.016	0.	0.012	0.03	-6.	-10.	-1.	3.	6.	1. 0.03
28694	STIRL	COAL	0.	-0.259	0.	0.189	0.25	-91.	-155.	-13.	54.	90.	14. 0.21
28694	HEGT60	COAL-A	0.	-0.027	0.	0.001	0.00	64.	-16.	-1.	73.	-1.	0. 0.21
28694	HEGT60	COAL-A	0.	-1.314	0.	0.050	0.03	-185.	-788.	-66.	254.	-42.	15. 0.14
28694	HEGT00	COAL-A	0.	-0.023	0.	0.005	0.01	65.	-14.	-1.	74.	2.	1. 0.22
28694	HEGT00	COAL-A	0.	-0.303	0.	0.068	0.10	-2.	-182.	-15.	118.	21.	7. 0.22
28694	FCMCCL	COAL	0.	-0.355	0.	0.282	0.30	110.	189.	14.	315.	538.	52. 1.00
28694	FCSTCL	COAL	0.	-0.415	0.	0.377	0.34	110.	189.	14.	365.	623.	61. 1.00
28694	IGGTST	COAL	0.	-0.364	0.	0.157	0.19	-127.	-218.	12.	40.	67.	43. 0.19
28694	GTSUAR	RESIDU	-0.332	0.316	-0.332	0.344	0.03	74.	64.	13.	83.	80.	15. 0.52
28694	GTSUAR	RESIDU	-0.683	0.316	-0.683	0.935	0.27	-52.	-68.	10.	147.	271.	47. 0.52
28694	GTAC08	RESIDU	0.	-0.013	0.	0.015	0.04	-5.	58.	-1.	2.	63.	-12. 0.16
28694	GTAC08	RESIDU	0.	-0.205	0.	0.235	0.31	-188.	-19.	-23.	-50.	206.	-17. 0.19
28694	GTAC12	RESIDU	0.	-0.013	0.	0.015	0.04	-5.	58.	-1.	2.	63.	-12. 0.15
28694	GTAC12	RESIDU	0.	-0.264	0.	0.289	0.33	-224.	-43.	-27.	-50.	243.	-18. 0.21
28694	GTAC16	RESIDU	0.	-0.014	0.	0.014	0.04	-5.	58.	-1.	2.	63.	-12. 0.15
28694	GTAC16	RESIDU	0.	-0.319	0.	0.322	0.34	-257.	-64.	-31.	-55.	267.	-19. 0.21
28694	GTWC16	RESIDU	0.	-0.015	0.	0.013	0.04	-5.	57.	-1.	1.	63.	-12. 0.15
28694	GTWC16	RESIDU	0.	-0.347	0.	0.306	0.32	-273.	-75.	-33.	-68.	261.	-21. 0.19

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---						
		*****DIRECT*****		*****TOTAL*****		*****DIRECT*****		*****TOTAL*****		*****DIRECT*****		*****TOTAL*****				
		FUEL OIL+GAS	COAL OIL+GAS	COAL	FESR	NOX	SOX	PART	NOX	SOX	PART	EMSR SAVING	TOTAL EXPORT MWH	COST	LAEC SAVED	
28694	DEHTPM RESIDU	0.	-0.015	0.	0.012	0.04	-5.	57.	-1.	1.	62.	-12.	0.15	6.	-20.	-4.
28694	DEHTPM RESIDU	0.	-0.310	0.	0.250	0.29	-450.	-61.	-31.	-275.	227.	-22.	-0.08	16.	50.	36.
28694	GTSOAD DISTIL	-0.330	0.316	-0.330	0.344	0.04	102.	136.	16.	109.	141.	4.	0.74	10.	0.	-56.
28694	GTSOAD DISTIL	-0.591	0.316	-0.591	0.856	0.31	2.	94.	16.	171.	371.	24.	0.69	50.	48.	22.
28694	GTRA08 DISTIL	0.	-0.016	0.	0.011	0.03	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-47.
28694	GTRA08 DISTIL	0.	-0.608	0.	0.423	0.31	-250.	-71.	0.	82.	493.	61.	0.50	75.	94.	31.
28694	GTRA12 DISTIL	0.	-0.016	0.	0.012	0.03	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-48.
28694	GTRA12 DISTIL	0.	-0.556	0.	0.420	0.32	-229.	-56.	1.	85.	478.	59.	0.51	70.	89.	30.
28694	GTRA16 DISTIL	0.	-0.016	0.	0.012	0.04	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-47.
28694	GTRA16 DISTIL	0.	-0.499	0.	0.390	0.32	-206.	-40.	2.	80.	446.	55.	0.51	62.	81.	30.
28694	GTR208 DISTIL	0.	-0.015	0.	0.012	0.04	34.	96.	10.	43.	112.	12.	0.49	9.	0.	-50.
28694	GTR208 DISTIL	0.	-0.395	0.	0.316	0.31	-164.	-10.	4.	64.	378.	46.	0.50	56.	64.	28.
28694	GTR212 DISTIL	0.	-0.015	0.	0.012	0.04	34.	96.	10.	43.	112.	12.	0.49	9.	0.	-50.
28694	GTR212 DISTIL	0.	-0.424	0.	0.339	0.31	-176.	-19.	3.	70.	399.	48.	0.50	58.	69.	28.
28694	GTR216 DISTIL	0.	-0.015	0.	0.013	0.04	34.	96.	10.	43.	112.	12.	0.49	9.	0.	-49.
28694	GTR216 DISTIL	0.	-0.430	0.	0.356	0.32	-178.	-20.	3.	74.	409.	50.	0.51	57.	71.	29.
28694	GTRW08 DISTIL	0.	-0.018	0.	0.010	0.03	34.	96.	10.	43.	111.	12.	0.48	9.	0.	-44.
28694	GTRW08 DISTIL	0.	-0.786	0.	0.423	0.28	-321.	-120.	-3.	68.	540.	69.	0.47	90.	111.	33.
28694	GTRW12 DISTIL	0.	-0.017	0.	0.011	0.03	34.	96.	10.	43.	111.	12.	0.48	9.	0.	-45.
28694	GTRW12 DISTIL	0.	-0.733	0.	0.460	0.30	-300.	-106.	-2.	84.	547.	69.	0.49	89.	109.	31.
28694	GTRW16 DISTIL	0.	-0.017	0.	0.011	0.03	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-44.
28694	GTRW16 DISTIL	0.	-0.649	0.	0.428	0.31	-266.	-82.	-1.	80.	507.	63.	0.49	80.	98.	31.
28694	GTR308 DISTIL	0.	-0.019	0.	0.009	0.03	34.	95.	10.	43.	111.	12.	0.48	9.	0.	-45.
28694	GTR308 DISTIL	0.	-0.615	0.	0.287	0.24	-252.	-72.	-0.	38.	421.	53.	0.44	72.	82.	33.
28694	GTR312 DISTIL	0.	-0.016	0.	0.012	0.03	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-48.
28694	GTR312 DISTIL	0.	-0.526	0.	0.374	0.31	-217.	-47.	1.	73.	445.	55.	0.50	70.	82.	29.
28694	GTR316 DISTIL	0.	-0.016	0.	0.011	0.03	34.	96.	10.	43.	111.	12.	0.49	9.	0.	-46.
28694	GTR316 DISTIL	0.	-0.518	0.	0.366	0.30	-214.	-45.	2.	71.	438.	54.	0.50	68.	80.	29.
28694	FCPADS DISTIL	0.	-0.019	0.	0.009	0.03	34.	95.	10.	43.	111.	12.	0.48	8.	0.	-24.
28694	FCPADS DISTIL	0.	-1.264	0.	0.612	0.28	-199.	174.	15.	404.	1200.	126.	0.84	72.	173.	54.
28694	FCMCDS DISTIL	0.	-0.016	0.	0.012	0.04	34.	96.	10.	43.	111.	12.	0.49	8.	0.	-29.
28694	FCMCDS DISTIL	0.	-0.837	0.	0.647	0.36	-730.	172.	-2.	-253.	984.	86.	0.48	52.	137.	49.
28731	PFBSTM COAL-P	0.	-0.014	0.	0.017	0.03	141.	-8.	3.	151.	9.	5.	0.25	5.	0.	15.
28731	PFBSTM COAL-P	0.	-0.090	0.	0.110	0.13	167.	-54.	21.	231.	55.	33.	0.39	17.	16.	17.
28731	TIHRSG RESIDU	0.	-0.026	0.	0.006	0.01	-9.	116.	-1.	-4.	114.	-26.	0.13	10.	0.	-48.
28731	TIHRSG RESIDU	0.	-0.357	0.	0.078	0.07	-125.	-16.	-18.	8.	192.	-32.	0.18	-58.	38.	82.
28731	TIHRSG COAL	0.	-0.026	0.	0.006	0.01	-9.	-15.	-1.	1.	2.	1.	0.01	-17.	0.	184.
28731	TIHRSG COAL	0.	-0.357	0.	0.078	0.07	-125.	-214.	-18.	15.	24.	8.	0.05	-95.	38.	95.
28731	HEGT00 COAL-A	0.	-0.027	0.	0.004	0.01	130.	-16.	-1.	140.	1.	1.	0.21	-5.	0.	86.
28731	HEGT00 COAL-A	0.	-0.572	0.	0.091	0.07	3.	-343.	-29.	216.	19.	11.	0.20	-7.	59.	44.
28731	FCMCCL COAL	0.	-0.015	0.	0.016	0.02	6.	11.	1.	16.	28.	3.	0.07	-11.	0.	127.
28731	FCMCCL COAL	0.	-0.519	0.	0.575	0.33	221.	379.	29.	573.	977.	94.	1.00	15.	100.	31.
28731	GTSOAR RESIDU	-0.653	0.632	-0.653	0.664	0.02	145.	134.	26.	155.	151.	28.	0.50	18.	0.	-119.
28731	GTSOAR RESIDU	-1.590	0.632	-1.590	2.073	0.23	-176.	-219.	19.	287.	569.	104.	0.49	107.	132.	26.
28731	GTAC08 RESIDU	0.	-0.015	0.	0.017	0.03	-14.	121.	-2.	-9.	118.	-26.	0.13	19.	0.	-129.
28731	GTAC08 RESIDU	0.	-0.417	0.	0.469	0.31	-408.	-40.	-49.	-131.	412.	-38.	0.17	83.	80.	15.

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				-----EMISSIONS SAVINGS-----				CAPITL--ELECTRIC POWER---			
		ECS	*****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT
													MWH
28731	GTAC12	RESIDU	0.	-0.015	0.	0.017	0.03	-13.	121.	-2.	-8.	118.	-26. 0.13
28731	GTAC12	RESIDU	0.	-0.512	0.	0.579	0.34	-465.	-78.	-56.	-123.	484.	-37. 0.20
28731	GTAC16	RESIDU	0.	-0.016	0.	0.015	0.02	-13.	120.	-2.	-8.	118.	-26. 0.13
28731	GTAC16	RESIDU	0.	-0.663	0.	0.645	0.33	-556.	-139.	-67.	-145.	538.	-42. 0.19
28731	GTWC16	RESIDU	0.	-0.017	0.	0.015	0.02	-14.	120.	-2.	-9.	118.	-26. 0.13
28731	GTWC16	RESIDU	0.	-0.692	0.	0.612	0.32	-573.	-150.	-70.	-164.	523.	-45. 0.17
28731	GTSOAD	DISTIL	-0.648	0.632	-0.648	0.664	0.02	199.	274.	32.	204.	272.	8. 0.73
28731	GTSOAD	DISTIL	-1.182	0.632	-1.182	1.711	0.31	-15.	187.	32.	323.	742.	48. 0.68
28731	GTRA08	DISTIL	0.	-0.021	0.	0.010	0.01	66.	195.	21.	76.	213.	22. 0.47
28731	GTRA08	DISTIL	0.	-2.023	0.	0.939	0.26	-841.	-368.	-14.	112.	1252.	162. 0.45
28731	GTRA12	DISTIL	0.	-0.020	0.	0.011	0.02	66.	196.	21.	77.	213.	22. 0.47
28731	GTRA12	DISTIL	0.	-1.644	0.	0.903	0.28	-689.	-261.	-7.	130.	1131.	144. 0.47
28731	GTRA16	DISTIL	0.	-0.020	0.	0.012	0.02	66.	196.	21.	77.	213.	22. 0.47
28731	GTRA16	DISTIL	0.	-1.362	0.	0.813	0.29	-576.	-182.	-2.	123.	1008.	126. 0.47
28731	GTR208	DISTIL	0.	-0.019	0.	0.012	0.02	66.	196.	21.	76.	213.	22. 0.47
28731	GTR208	DISTIL	0.	-0.958	0.	0.632	0.28	-415.	-68.	5.	97.	802.	99. 0.47
28731	GTR212	DISTIL	0.	-0.019	0.	0.012	0.02	66.	196.	21.	76.	213.	22. 0.47
28731	GTR212	DISTIL	0.	-1.033	0.	0.685	0.29	-445.	-89.	3.	108.	850.	105. 0.48
28731	GTR216	DISTIL	0.	-0.019	0.	0.013	0.02	67.	196.	21.	77.	213.	22. 0.47
28731	GTR216	DISTIL	0.	-1.065	0.	0.723	0.30	-458.	-98.	3.	118.	879.	109. 0.48
28731	GTRW08	DISTIL	0.	-0.023	0.	0.009	0.01	66.	195.	20.	76.	212.	22. 0.47
28731	GTRW08	DISTIL	0.	-2.357	0.	0.922	0.24	-975.	-462.	-19.	81.	1331.	175. 0.43
28731	GTRW12	DISTIL	0.	-0.021	0.	0.010	0.02	66.	196.	21.	76.	213.	22. 0.47
28731	GTRW12	DISTIL	0.	-1.992	0.	0.993	0.27	-828.	-359.	-13.	132.	1273.	164. 0.46
28731	GTRW16	DISTIL	0.	-0.020	0.	0.011	0.02	66.	196.	21.	77.	213.	22. 0.47
28731	GTRW16	DISTIL	0.	-1.619	0.	0.893	0.28	-679.	-254.	-7.	129.	1119.	142. 0.47
28731	GTR308	DISTIL	0.	-0.023	0.	0.008	0.01	65.	195.	20.	75.	212.	22. 0.47
28731	GTR308	DISTIL	0.	-1.594	0.	0.563	0.20	-669.	-247.	-6.	25.	932.	121. 0.41
28731	GTR312	DISTIL	0.	-0.019	0.	0.012	0.02	67.	196.	21.	77.	213.	22. 0.47
28731	GTR312	DISTIL	0.	-1.151	0.	0.755	0.30	-492.	-122.	1.	121.	920.	114. 0.48
28731	GTR316	DISTIL	0.	-0.019	0.	0.012	0.02	67.	196.	21.	77.	213.	22. 0.47
28731	GTR316	DISTIL	0.	-1.127	0.	0.737	0.30	-483.	-116.	2.	117.	904.	112. 0.48
28731	FCPADS	DISTIL	0.	-0.021	0.	0.010	0.02	72.	203.	21.	82.	220.	23. 0.49
28731	FCPADS	DISTIL	0.	-2.530	0.	1.225	0.28	-395.	379.	32.	813.	2433.	254. 0.85
28731	FCMCDS	DISTIL	0.	-0.018	0.	0.014	0.02	59.	203.	21.	69.	220.	22. 0.47
28731	FCMCDS	DISTIL	0.	-1.675	0.	1.296	0.36	-1521.	376.	-3.	-565.	2001.	173. 0.47
28741	STM141	RESIDU	0.	-0.013	0.	0.021	0.18	-23.	12.	-1.	-13.	28.	-3. 0.12
28741	STM141	RESIDU	0.	-0.022	0.	0.036	0.25	-26.	8.	-1.	-8.	37.	-2. 0.22
28741	STM141	COAL-F	0.	-0.013	0.	0.021	0.18	-23.	-8.	-1.	-12.	11.	1. 0.00
28741	STM141	COAL-F	0.	-0.022	0.	0.036	0.25	-26.	-13.	-1.	-7.	19.	2. 0.11
28741	STM141	COAL-A	0.	-0.013	0.	0.021	0.18	-2.	-8.	-1.	9.	11.	1. 0.22
28741	STM141	COAL-A	0.	-0.022	0.	0.036	0.25	-3.	-13.	-1.	16.	19.	2. 0.30
28741	STM088	RESIDU	0.	-0.013	0.	0.021	0.18	-23.	12.	-1.	-13.	28.	-3. 0.12
28741	STM088	RESIDU	0.	-0.017	0.	0.028	0.21	-24.	10.	-1.	-11.	32.	-2. 0.17
28741	STM088	COAL-F	0.	-0.013	0.	0.021	0.18	-23.	-8.	-1.	-12.	11.	1. 0.00
28741	STM088	COAL-F	0.	-0.017	0.	0.028	0.21	-24.	-10.	-1.	-10.	14.	2. 0.06

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FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
EMISSION UNITS= TIME 1990 LEVEL ALL
COST = \$*10**9 TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS***** - - - EMISSIONS SAVINGS - - -										CAPITL--ELECTRIC POWER---					
		*****DIRECT*****		TOTAL		FESR		DIRECT		TOTAL		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART	
28741	STM088	COAL-A	0.	-0.013	0.	0.021	0.18	-2.	-8.	-1.	9.	11.	1. 0.22	-1.	0.	45.	0.
28741	STM088	COAL-A	0.	-0.017	0.	0.028	0.21	-2.	-10.	-1.	12.	14.	2. 0.26	2.	1.	20.	1.
28741	PFBSTM	COAL-P	0.	-0.013	0.	0.021	0.17	1.	-8.	1.	12.	11.	3. 0.26	-4.	0.	73.	-0.
28741	PFBSTM	COAL-P	0.	-0.034	0.	0.054	0.31	3.	-20.	2.	31.	28.	8. 0.45	0.	5.	34.	0.
28741	TISTMT	RESIDU	0.	-0.013	0.	0.021	0.17	-23.	12.	-1.	-13.	27.	-3. 0.12	-6.	0.	79.	-2.
28741	TISTMT	RESIDU	0.	-0.044	0.	0.071	0.35	-34.	-1.	-2.	2.	58.	-1. 0.34	-15.	8.	70.	-3.
28741	TISTMT	COAL	0.	-0.013	0.	0.021	0.17	-23.	-8.	-1.	-12.	11.	1. -0.00	-14.	0.	143.	-2.
28741	TISTMT	COAL	0.	-0.044	0.	0.071	0.35	-34.	-27.	-2.	3.	36.	5. 0.25	-25.	8.	56.	-3.
28741	TIHRSG	RESIDU	0.	-0.018	0.	0.016	0.13	-25.	10.	-1.	-15.	25.	-3. 0.08	-12.	0.	131.	-3.
28741	TIHRSG	RESIDU	0.	-0.026	0.	0.023	0.17	-28.	7.	-1.	-13.	30.	-3. 0.13	-16.	1.	120.	-3.
28741	TIHRSG	COAL	0.	-0.018	0.	0.016	0.13	-25.	-11.	-1.	-14.	8.	1. -0.05	-21.	0.	198.	-3.
28741	TIHRSG	COAL	0.	-0.026	0.	0.023	0.17	-28.	-16.	-1.	-12.	11.	2. 0.01	-24.	1.	159.	-3.
28741	STIRL	DISTIL	0.	-0.019	0.	0.015	0.13	-12.	22.	3.	-2.	40.	4. 0.44	4.	0.	17.	-1.
28741	STIRL	DISTIL	0.	-0.068	0.	0.054	0.26	-24.	8.	2.	16.	75.	9. 0.55	8.	8.	30.	-2.
28741	STIRL	RESIDU	0.	-0.019	0.	0.015	0.13	-25.	10.	-2.	-15.	25.	-4. 0.06	4.	0.	12.	-1.
28741	STIRL	RESIDU	0.	-0.068	0.	0.054	0.26	-42.	-10.	-7.	-4.	52.	-6. 0.23	8.	8.	25.	-1.
28741	STIRL	COAL	0.	-0.019	0.	0.015	0.13	-25.	-11.	-1.	-14.	7.	1. -0.06	-3.	0.	66.	-0.
28741	STIRL	COAL	0.	-0.068	0.	0.054	0.26	-42.	-41.	-3.	-3.	26.	4. 0.15	0.	8.	35.	0.
28741	HEGT85	COAL-A	0.	-0.028	0.	0.006	0.05	-5.	-17.	-1.	5.	2.	1. 0.08	-11.	0.	127.	-1.
28741	HEGT85	COAL-A	0.	-0.442	0.	0.087	0.14	-84.	-265.	-22.	86.	24.	9. 0.21	-36.	46.	59.	-9.
28741	HEGT60	COAL-A	0.	-0.027	0.	0.007	0.06	-6.	-16.	-1.	5.	2.	1. 0.08	-10.	0.	122.	-1.
28741	HEGT60	COAL-A	0.	-0.155	0.	0.040	0.14	-32.	-93.	-8.	30.	14.	4. 0.19	-20.	15.	66.	-4.
28741	HEGT00	COAL-A	0.	-0.026	0.	0.008	0.07	-6.	-16.	-1.	5.	3.	1. 0.08	-9.	0.	113.	-1.
28741	HEGT00	COAL-A	0.	-0.062	0.	0.019	0.11	-15.	-37.	-3.	11.	7.	2. 0.14	-11.	4.	72.	-1.
28741	FCMCCL	COAL	0.	-0.016	0.	0.016	0.15	-11.	12.	1.	-1.	30.	3. 0.33	-9.	0.	104.	-1.
28741	FCMCCL	COAL	0.	-0.068	0.	0.072	0.34	11.	51.	4.	58.	131.	13. 1.00	-9.	11.	51.	-1.
28741	FCSTCL	COAL	0.	-0.015	0.	0.019	0.16	-14.	7.	1.	-3.	26.	3. 0.25	-8.	0.	101.	-1.
28741	FCSTCL	COAL	0.	-0.106	0.	0.133	0.41	11.	51.	4.	88.	182.	18. 1.00	-8.	19.	44.	-1.
28741	IGGTST	COAL	0.	-0.019	0.	0.015	0.13	-25.	-11.	1.	-14.	7.	3. -0.04	-8.	0.	105.	-1.
28741	IGGTST	COAL	0.	-0.093	0.	0.076	0.30	-51.	-56.	3.	3.	37.	13. 0.24	-8.	13.	47.	-1.
28741	GTSOAR	RESIDU	-0.104	0.086	-0.104	0.119	0.13	-5.	12.	3.	6.	31.	5. 0.42	4.	0.	13.	-1.
28741	GTSOAR	RESIDU	-0.170	0.086	-0.170	0.239	0.29	-31.	-13.	3.	19.	72.	12. 0.49	11.	11.	23.	-1.
28741	GTAC08	RESIDU	0.	-0.016	0.	0.018	0.15	-34.	11.	-2.	-24.	26.	-4. -0.02	4.	0.	6.	-0.
28741	GTAC08	RESIDU	0.	-0.056	0.	0.063	0.31	-73.	-5.	-7.	-36.	56.	-5. 0.08	10.	8.	16.	-0.
28741	GTAC12	RESIDU	0.	-0.016	0.	0.018	0.15	-33.	11.	-2.	-23.	26.	-4. -0.00	4.	0.	6.	-0.
28741	GTAC12	RESIDU	0.	-0.071	0.	0.078	0.33	-82.	-11.	-8.	-36.	66.	-5. 0.12	12.	11.	19.	-0.
28741	GTAC16	RESIDU	0.	-0.016	0.	0.017	0.15	-32.	11.	-2.	-22.	26.	-4. -0.00	4.	0.	7.	-0.
28741	GTAC16	RESIDU	0.	-0.082	0.	0.087	0.34	-89.	-16.	-9.	-36.	72.	-5. 0.14	13.	13.	21.	-0.
28741	GTWC16	RESIDU	0.	-0.018	0.	0.016	0.13	-33.	10.	-2.	-23.	25.	-4. -0.02	4.	0.	11.	-1.
28741	GTWC16	RESIDU	0.	-0.094	0.	0.083	0.32	-96.	-21.	-9.	-41.	71.	-6. 0.10	13.	13.	23.	-1.
28741	CC1626	RESIDU	0.	-0.018	0.	0.016	0.13	-32.	10.	-2.	-21.	25.	-4. -0.00	4.	0.	14.	-1.
28741	CC1626	RESIDU	0.	-0.160	0.	0.140	0.36	-135.	-47.	-14.	-41.	110.	-7. 0.18	20.	25.	25.	-1.
28741	CC1622	RESIDU	0.	-0.017	0.	0.016	0.14	-31.	10.	-2.	-21.	26.	-4. 0.01	4.	0.	11.	-1.
28741	CC1622	RESIDU	0.	-0.138	0.	0.132	0.37	-122.	-38.	-13.	-37.	103.	-6. 0.19	18.	22.	2.	-1.
28741	CC1222	RESIDU	0.	-0.017	0.	0.017	0.14	-31.		-2.	-21.	26.	-4. 0.01	4.	0.		-1.
28741	CC12	RESIDU	0.	-0.136	0.	0.133	0.37	-121.		-13.	-37.	103.	-6. 0.19	19.	22.	24.	-1.

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING***** - - - EMISSIONS SAVING - - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****		TOTAL		FESR		DIRECT		TOTAL		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX						PART	EXPORT
28741	CC0822	RESIDU	0.	-0.016	0.	0.018	0.15	-31.	11.	-2.	-21.	26.	-4.	0.01	4.	0.	10.	-1.
28741	CC0822	RESIDU	0.	-0.102	0.	0.114	0.38	-101.	-24.	-10.	-33.	39.	-5.	0.19	16.	17.	22.	-0.
28741	STIG15	RESIDU	0.	-0.028	0.	0.006	0.05	-35.	6.	-1.	-25.	21.	-3.	-0.08	4.	0.	23.	-1.
28741	STIG15	RESIDU	0.	-5.505	0.	1.151	0.17	-3343.	-2185.	-163.	-1243.	1288.	7.	0.01	433.	621.	37.	-90.
28741	STIG10	RESIDU	0.	-0.025	0.	0.008	0.07	-35.	7.	-1.	-25.	22.	-3.	-0.06	4.	0.	18.	-1.
28741	STIG10	RESIDU	0.	-0.463	0.	0.153	0.22	-318.	-168.	-12.	-124.	152.	2.	0.05	42.	55.	33.	-7.
28741	STIG1S	RESIDU	0.	-0.024	0.	0.010	0.08	-35.	7.	-1.	-25.	23.	-3.	-0.05	4.	0.	17.	-1.
28741	STIG1S	RESIDU	0.	-0.259	0.	0.102	0.23	-195.	-87.	-6.	-82.	101.	2.	0.05	25.	31.	31.	-4.
28741	DEADV3	RESIDU	0.	-0.022	0.	0.012	0.10	-43.	8.	-2.	-33.	24.	-4.	-0.14	2.	0.	30.	-1.
28741	DEADV3	RESIDU	0.	-0.260	0.	0.141	0.29	-316.	-87.	-22.	-190.	122.	-12.	-0.18	13.	34.	38.	-5.
28741	DEHTPM	RESIDU	0.	-0.016	0.	0.018	0.15	-44.	11.	-2.	-33.	26.	-4.	-0.11	2.	0.	26.	-1.
28741	DEHTPM	RESIDU	0.	-0.084	0.	0.092	0.35	-149.	-16.	-9.	-94.	75.	-5.	-0.11	7.	13.	29.	-1.
28741	DES0A3	DISTIL	-0.109	0.086	-0.109	0.119	0.08	-47.	34.	4.	-37.	49.	2.	0.14	3.	0.	31.	-2.
28741	DES0A3	DISTIL	-0.412	0.086	-0.412	0.550	0.25	-771.	-16.	4.	-625.	226.	15.	-0.77	5.	40.	51.	-11.
28741	DES0A3	RESIDU	-0.109	0.086	-0.109	0.119	0.08	-118.	10.	3.	-107.	29.	5.	-0.74	3.	0.	26.	-1.
28741	DES0A3	RESIDU	-0.412	0.086	-0.412	0.550	0.25	-1656.	-104.	1.	-1507.	150.	28.	-2.67	5.	40.	45.	-8.
28741	GTS0AD	DISTIL	-0.102	0.086	-0.102	0.119	0.14	3.	35.	4.	13.	50.	2.	0.66	4.	0.	9.	-1.
28741	GTS0AD	DISTIL	-0.157	0.086	-0.157	0.229	0.31	-20.	26.	4.	25.	100.	6.	0.65	12.	10.	22.	-2.
28741	GTRA08	DISTIL	0.	-0.018	0.	0.016	0.13	-17.	22.	3.	-7.	41.	5.	0.39	3.	0.	18.	-1.
28741	GTRA08	DISTIL	0.	-0.127	0.	0.110	0.34	-74.	-9.	1.	3.	121.	15.	0.48	15.	19.	30.	-3.
28741	GTRA12	DISTIL	0.	-0.018	0.	0.016	0.13	-17.	22.	3.	-6.	41.	5.	0.39	4.	0.	16.	-1.
28741	GTRA12	DISTIL	0.	-0.122	0.	0.110	0.35	-71.	-7.	1.	3.	120.	14.	0.49	15.	19.	29.	-3.
28741	GTRA16	DISTIL	0.	-0.018	0.	0.016	0.14	-17.	22.	3.	-7.	41.	5.	0.39	3.	0.	18.	-1.
28741	GTRA16	DISTIL	0.	-0.113	0.	0.103	0.34	-68.	-5.	1.	2.	114.	14.	0.48	13.	17.	30.	-3.
28741	GTR208	DISTIL	0.	-0.018	0.	0.016	0.13	-18.	22.	3.	-7.	41.	5.	0.39	4.	0.	15.	-1.
28741	GTR208	DISTIL	0.	-0.094	0.	0.086	0.32	-60.	1.	1.	-2.	99.	12.	0.46	13.	14.	27.	-2.
28741	GTR212	DISTIL	0.	-0.018	0.	0.016	0.13	-18.	22.	3.	-7.	41.	5.	0.39	4.	0.	16.	-1.
28741	GTR212	DISTIL	0.	-0.101	0.	0.091	0.33	-63.	-1.	1.	-1.	104.	12.	0.47	13.	15.	28.	-2.
28741	GTR216	DISTIL	0.	-0.017	0.	0.016	0.14	-18.	22.	3.	-7.	41.	5.	0.39	4.	0.	16.	-1.
28741	GTR216	DISTIL	0.	-0.102	0.	0.095	0.34	-63.	-1.	1.	0.	106.	13.	0.48	13.	15.	28.	-2.
28741	GTRW08	DISTIL	0.	-0.021	0.	0.013	0.11	-18.	21.	2.	-7.	40.	4.	0.38	3.	0.	21.	-2.
28741	GTRW08	DISTIL	0.	-0.173	0.	0.111	0.30	-92.	-21.	-0.	-1.	134.	17.	0.45	18.	23.	33.	-4.
28741	GTRW12	DISTIL	0.	-0.020	0.	0.014	0.12	-18.	22.	2.	-7.	40.	4.	0.38	3.	0.	20.	-2.
28741	GTRW12	DISTIL	0.	-0.168	0.	0.120	0.32	-90.	-20.	-0.	3.	138.	17.	0.47	19.	24.	32.	-4.
28741	GTRW16	DISTIL	0.	-0.019	0.	0.014	0.12	-18.	22.	2.	-7.	40.	4.	0.38	3.	0.	21.	-2.
28741	GTRW16	DISTIL	0.	-0.154	0.	0.113	0.32	-84.	-16.	0.	2.	130.	16.	0.47	17.	22.	32.	-4.
28741	GTR308	DISTIL	0.	-0.021	0.	0.012	0.10	-19.	21.	2.	-8.	40.	4.	0.37	4.	0.	20.	-2.
28741	GTR308	DISTIL	0.	-0.138	0.	0.079	0.26	-78.	-12.	0.	-8.	107.	13.	0.42	15.	17.	33.	-4.
28741	GTR312	DISTIL	0.	-0.019	0.	0.015	0.12	-18.	22.	2.	-7.	40.	4.	0.38	4.	0.	18.	-1.
28741	GTR312	DISTIL	0.	-0.133	0.	0.101	0.32	-76.	-10.	1.	-1.	117.	14.	0.46	16.	19.	30.	-3.
28741	GTR316	DISTIL	0.	-0.019	0.	0.014	0.12	-18.	22.	2.	-7.	40.	4.	0.38	3.	0.	19.	-1.
28741	GTR316	DISTIL	0.	-0.131	0.	0.098	0.31	-75.	-10.	1.	-1.	116.	14.	0.46	15.	18.	31.	-3.
28741	FCPADS	DISTIL	0.	-0.023	0.	0.011	0.09	-12.	29.	3.	-2.	47.	5.	0.51	4.	0.	32.	-2.
28741	FCPADS	DISTIL	0.	-0.342	0.	0.166	0.28	-72.	51.	4.	92.	329.	34.	0.85	19.	44.	54.	-15.
28741	FCMCDS	DISTIL	0.	-0.019	0.	0.015	0.12	-26.	29.	3.	-13.	48.	5.	0.37	3.	0.	27.	-2.
28741	FCMCDS	DISTIL	0.	-0.226	0.	0.175	0.36	-224.	51.	-0.	-95.	270.	23.	0.45	14.	35.	48.	-10.

HONEYWELL PAGE PRINTING SYSTEM- 51105-03

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 54

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S***** - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR SAVING	TOTAL EXPORT	COST LAEC	POWER--			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
28951	STM141	RESIDU	0.	-0.005	0.	0.008	0.15	-2.	-2.	-0.	2.	5.	0.	0.15	0.	0.	54.	0.
28951	STM141	COAL-F	0.	-0.005	0.	0.008	0.15	-2.	-6.	-0.	2.	1.	1.	0.09	-2.	0.	50.	0.
28951	STM141	COAL-A	0.	-0.005	0.	0.008	0.15	3.	-6.	-0.	7.	1.	1.	0.20	-1.	0.	55.	0.
28951	STM088	RESIDU	0.	-0.004	0.	0.006	0.11	-1.	-1.	-0.	2.	4.	0.	0.12	0.	0.	55.	0.
28951	STM088	COAL-F	0.	-0.004	0.	0.006	0.11	-1.	-6.	-0.	2.	-0.	1.	0.06	-2.	0.	60.	0.
28951	STM088	COAL-A	0.	-0.004	0.	0.006	0.11	4.	-6.	-0.	7.	-0.	1.	0.16	-1.	0.	56.	0.
28951	PFBSTM	COAL-P	0.	-0.007	0.	0.012	0.22	5.	-8.	1.	11.	3.	2.	0.33	-3.	0.	64.	0.
28951	TISTMT	RESIDU	0.	-0.010	0.	0.015	0.29	-3.	-4.	-0.	5.	9.	1.	0.31	-7.	0.	100.	-1.
28951	TISTMT	COAL	0.	-0.010	0.	0.015	0.29	-3.	-9.	-0.	5.	5.	2.	0.23	-10.	0.	118.	-1.
28951	TIHRSG	RESIDU	0.	-0.005	0.	0.005	0.10	-2.	-2.	-0.	2.	3.	0.	0.11	-7.	0.	104.	-1.
28951	TIHRSG	COAL	0.	-0.005	0.	0.005	0.10	-2.	-7.	-0.	2.	-1.	1.	0.05	-9.	0.	114.	-1.
28951	STIRL	DISTIL	0.	-0.016	0.	0.013	0.25	-1.	-2.	0.	8.	14.	3.	0.52	1.	0.	41.	-0.
28951	STIRL	RESIDU	0.	-0.016	0.	0.013	0.25	-5.	-6.	-2.	4.	9.	-1.	0.25	1.	0.	36.	0.
28951	STIRL	COAL	0.	-0.016	0.	0.013	0.25	-5.	-13.	-1.	4.	3.	2.	0.18	-1.	0.	48.	0.
28951	HEGT85	COAL-A	0.	-0.025	0.	0.009	0.16	-1.	-19.	-1.	10.	0.	1.	0.25	-11.	0.	128.	-1.
28951	HEGT85	COAL-A	0.	-0.055	0.	0.019	0.20	-7.	-37.	-3.	17.	4.	2.	0.28	-15.	4.	91.	-2.
28951	HEGT60	COAL-A	0.	-0.025	0.	0.009	0.17	-1.	-18.	-1.	10.	1.	2.	0.25	-9.	0.	115.	-1.
28951	HEGT60	COAL-A	0.	-0.027	0.	0.010	0.18	-2.	-20.	-1.	10.	1.	2.	0.25	-9.	0.	105.	-1.
28951	HEGT00	COAL-A	0.	-0.013	0.	0.005	0.09	1.	-11.	-1.	7.	-1.	1.	0.13	-6.	0.	85.	-0.
28951	FCMCCL	COAL	0.	-0.015	0.	0.017	0.32	6.	7.	1.	17.	25.	3.	0.96	-6.	0.	83.	-0.
28951	FCSTCL	COAL	0.	-0.015	0.	0.019	0.36	4.	4.	1.	15.	23.	3.	0.86	-7.	0.	94.	-1.
28951	FCSTCL	COAL	0.	-0.023	0.	0.029	0.41	6.	7.	1.	23.	36.	5.	1.00	-7.	2.	71.	-0.
28951	IGGTST	COAL	0.	-0.019	0.	0.015	0.29	-7.	-15.	1.	4.	4.	3.	0.25	-7.	0.	95.	-1.
28951	IGGTST	COAL	0.	-0.020	0.	0.016	0.30	-7.	-16.	1.	5.	5.	4.	0.26	-6.	0.	86.	-0.
28951	GTSGAR	RESIDU	-0.017	0.	-0.017	0.032	0.29	-7.	-6.	-0.	4.	11.	2.	0.41	1.	0.	37.	0.
28951	GTAC08	RESIDU	0.	-0.012	0.	0.014	0.26	-12.	-5.	-1.	-4.	9.	-0.	0.10	1.	0.	36.	0.
28951	GTAC12	RESIDU	0.	-0.015	0.	0.017	0.33	-14.	-6.	-2.	-4.	11.	-0.	0.15	1.	0.	31.	0.
28951	GTAC16	RESIDU	0.	-0.016	0.	0.018	0.34	-14.	-6.	-2.	-3.	12.	-0.	0.17	1.	0.	34.	0.
28951	GTAC16	RESIDU	0.	-0.017	0.	0.019	0.35	-15.	-7.	-2.	-3.	12.	-0.	0.17	1.	0.	31.	0.
28951	GTWC16	RESIDU	0.	-0.018	0.	0.016	0.30	-15.	-7.	-2.	-4.	11.	-1.	0.13	1.	0.	39.	0.
28951	GTWC16	RESIDU	0.	-0.021	0.	0.018	0.31	-17.	-8.	-2.	-5.	12.	-1.	0.13	1.	0.	35.	0.
28951	CC1626	RESIDU	0.	-0.018	0.	0.016	0.30	-13.	-7.	-2.	-3.	11.	-0.	0.16	0.	0.	46.	-0.
28951	CC1626	RESIDU	0.	-0.034	0.	0.030	0.36	-25.	-14.	-3.	-5.	20.	-1.	0.20	2.	3.	36.	-0.
28951	CC1622	RESIDU	0.	-0.017	0.	0.016	0.32	-13.	-7.	-2.	-2.	11.	-0.	0.18	1.	0.	43.	0.
28951	CC1622	RESIDU	0.	-0.030	0.	0.029	0.37	-22.	-12.	-3.	-4.	19.	-1.	0.21	2.	2.	34.	0.
28951	CC1222	RESIDU	0.	-0.017	0.	0.017	0.32	-13.	-7.	-2.	-2.	11.	-0.	0.18	1.	0.	41.	0.
28951	CC1222	RESIDU	0.	-0.029	0.	0.029	0.37	-22.	-12.	-3.	-4.	19.	-0.	0.21	2.	2.	33.	0.
28951	CC0822	RESIDU	0.	-0.016	0.	0.018	0.34	-13.	-6.	-2.	-2.	12.	-0.	0.19	1.	0.	40.	0.
28951	CC0822	RESIDU	0.	-0.022	0.	0.025	0.38	-18.	-9.	-2.	-3.	16.	-0.	0.21	2.	1.	33.	0.
28951	STIG15	RESIDU	0.	-0.028	0.	0.006	0.11	-17.	-11.	-1.	-6.	6.	0.	0.01	0.	0.	57.	-0.
28951	STIG15	RESIDU	0.	-1.197	0.	0.250	0.17	-723.	-479.	-36.	-266.	277.	2.	0.01	88.	133.	39.	-20.
28951	STIG10	RESIDU	0.	-0.025	0.	0.008	0.16	-16.	-10.	-1.	-6.	8.	0.	0.04	0.	0.	51.	-0.
28951	STIG10	RESIDU	0.	-0.101	0.	0.033	0.22	-65.	-40.	-3.	-23.	30.	1.	0.06	6.	9.	40.	-1.
28951	STIG1S	RESIDU	0.	-0.024	0.	0.010	0.18	-17.	-10.	-1.	-6.	8.	0.	0.06	1.	0.	49.	-0.
28951	STIG1S	RESIDU	0.	-0.056	0.	0.022	0.23	-38.	-2.	-1.	-14.	19.	1.	0.07	3.	4.	31.	-0.
28951	DEADV	ESIDU	0.	-0.021	0.	0.013	0.24	-25.	-	-2.	-14.	9.	-1.	-0.11	-1.	0.	58.	-0.

DATE 06/12/79
ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 55

FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S***** - - - EMISSIONS SAVING S - - -										CAPITL--ELECTRIC POWER---						
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
28951	DEADV3	RESIDU	0.	-0.049	0.	0.029	0.30	-58.	-20.	-4.	-33.	22.	-2.	-0.14	1.	4.	44.	-1.
28951	DEHTPM	RESIDU	0.	-0.015	0.	0.019	0.36	-24.	-6.	-2.	-13.	12.	-0.	-0.03	-1.	0.	49.	0.
28951	DEHTPM	RESIDU	0.	-0.018	0.	0.022	0.38	-28.	-7.	-2.	-15.	14.	-0.	-0.03	-0.	1.	43.	0.
28951	DESQA3	DISTIL	-0.023	0.	-0.023	0.034	0.21	-55.	0.	0.	-44.	17.	0.	-0.66	-0.	0.	59.	-1.
28951	DESQA3	DISTIL	-0.061	0.	-0.061	0.089	0.27	-148.	-6.	0.	-120.	41.	2.	-0.84	1.	5.	52.	-2.
28951	DESQA3	RESIDU	-0.023	0.	-0.023	0.034	0.21	-120.	-9.	-0.	-109.	10.	2.	-2.42	-0.	0.	54.	-0.
28951	DESQA3	RESIDU	-0.061	0.	-0.061	0.089	0.27	-318.	-23.	-0.	-290.	26.	5.	-2.81	1.	5.	47.	-1.
28951	GTSQAD	DISTIL	-0.015	0.	-0.015	0.031	0.30	-6.	-2.	0.	4.	14.	1.	0.51	2.	0.	36.	0.
28951	GTRA08	DISTIL	0.	-0.017	0.	0.016	0.31	-7.	-3.	0.	4.	16.	3.	0.49	0.	0.	47.	-0.
28951	GTRA08	DISTIL	0.	-0.025	0.	0.024	0.35	-11.	-5.	0.	5.	22.	4.	0.50	1.	1.	39.	-0.
28951	GTRA12	DISTIL	0.	-0.017	0.	0.017	0.32	-7.	-3.	0.	4.	16.	3.	0.50	0.	0.	46.	-0.
28951	GTRA12	DISTIL	0.	-0.024	0.	0.024	0.36	-11.	-5.	0.	5.	22.	4.	0.51	1.	1.	39.	-0.
28951	GTRA16	DISTIL	0.	-0.017	0.	0.017	0.32	-7.	-3.	0.	4.	16.	3.	0.49	0.	0.	47.	-0.
28951	GTRA16	DISTIL	0.	-0.023	0.	0.022	0.35	-10.	-4.	0.	5.	21.	4.	0.50	1.	1.	40.	-0.
28951	GTR208	DISTIL	0.	-0.017	0.	0.017	0.32	-7.	-3.	0.	4.	16.	3.	0.48	1.	0.	42.	-0.
28951	GTR208	DISTIL	0.	-0.019	0.	0.019	0.33	-9.	-3.	0.	4.	18.	3.	0.49	1.	0.	38.	-0.
28951	GTR212	DISTIL	0.	-0.017	0.	0.016	0.31	-7.	-3.	0.	4.	16.	3.	0.49	1.	0.	44.	-0.
28951	GTR212	DISTIL	0.	-0.021	0.	0.020	0.33	-9.	-4.	0.	4.	19.	3.	0.49	1.	1.	39.	-0.
28951	GTR216	DISTIL	0.	-0.017	0.	0.017	0.32	-7.	-3.	0.	4.	16.	3.	0.49	1.	0.	44.	-0.
28951	GTR216	DISTIL	0.	-0.021	0.	0.021	0.34	-9.	-4.	0.	4.	20.	3.	0.50	1.	1.	39.	-0.
28951	GTRW08	DISTIL	0.	-0.020	0.	0.014	0.26	-8.	-3.	0.	3.	16.	3.	0.46	0.	0.	52.	-0.
28951	GTRW08	DISTIL	0.	-0.035	0.	0.024	0.31	-15.	-8.	0.	4.	25.	4.	0.47	2.	2.	43.	-0.
28951	GTRW12	DISTIL	0.	-0.019	0.	0.015	0.28	-7.	-3.	0.	4.	16.	3.	0.47	0.	0.	51.	-0.
28951	GTRW12	DISTIL	0.	-0.034	0.	0.026	0.33	-15.	-7.	0.	5.	26.	4.	0.49	2.	2.	42.	-0.
28951	GTRW16	DISTIL	0.	-0.019	0.	0.015	0.28	-7.	-3.	0.	4.	16.	3.	0.47	0.	0.	51.	-0.
28951	GTRW16	DISTIL	0.	-0.032	0.	0.024	0.33	-14.	-7.	0.	5.	25.	4.	0.49	1.	2.	43.	-0.
28951	GTR308	DISTIL	0.	-0.021	0.	0.013	0.25	-8.	-4.	0.	3.	15.	3.	0.44	1.	0.	49.	-0.
28951	GTR308	DISTIL	0.	-0.027	0.	0.017	0.27	-12.	-5.	0.	3.	19.	4.	0.44	1.	1.	43.	-0.
28951	GTR312	DISTIL	0.	-0.019	0.	0.015	0.28	-7.	-3.	0.	4.	16.	3.	0.47	0.	0.	48.	-0.
28951	GTR312	DISTIL	0.	-0.028	0.	0.022	0.32	-12.	-6.	0.	4.	22.	4.	0.48	2.	1.	40.	-0.
28951	GTR316	DISTIL	0.	-0.019	0.	0.015	0.28	-8.	-3.	0.	3.	16.	3.	0.47	0.	0.	49.	-0.
28951	GTR316	DISTIL	0.	-0.028	0.	0.021	0.32	-12.	-6.	0.	4.	22.	4.	0.48	1.	1.	42.	-0.
28951	FCPADS	DISTIL	0.	-0.023	0.	0.011	0.21	-2.	4.	1.	9.	23.	3.	0.74	1.	0.	61.	-1.
28951	FCPADS	DISTIL	0.	-0.074	0.	0.036	0.28	-12.	7.	1.	24.	68.	8.	0.85	3.	7.	56.	-3.
28951	FCMCDS	DISTIL	0.	-0.019	0.	0.015	0.28	-16.	4.	0.	-5.	23.	3.	0.45	0.	0.	56.	-1.
28951	FCMCDS	DISTIL	0.	-0.049	0.	0.038	0.36	-45.	7.	-0.	-16.	55.	6.	0.46	2.	5.	51.	-2.
28	FCMCDS	DISTIL	-51.014	*****	-51.014	304.069	47.01	*****	-35282.	-5799.	-5897.320874.	20853.	0.34	38305.	49098.	28633.	-9496.	
29111	STM141	RESIDU	0.	-0.049	0.	0.082	0.16	-17.	58.	-2.	22.	116.	-12.	0.25	20.	0.	-5.	-2.
29111	STM141	RESIDU	0.	-0.062	0.	0.102	0.19	-22.	53.	-3.	28.	129.	-11.	0.27	22.	3.	-1.	-1.
29111	STM141	COAL-F	0.	-0.049	0.	0.082	0.16	-17.	-30.	-2.	25.	42.	5.	0.14	2.	0.	30.	2.
29111	STM141	COAL-F	0.	-0.062	0.	0.102	0.19	-22.	-37.	-3.	31.	53.	7.	0.17	8.	3.	18.	3.
29111	STM141	COAL-A	0.	-0.049	0.	0.082	0.16	76.	-30.	-2.	119.	42.	5.	0.33	9.	0.	17.	3.
29111	STM141	COAL-A	0.	-0.062	0.	0.102	0.19	75.	-37.	-3.	128.	53.	7.	0.35	17.	3.	5.	4.
29111	STM088	RESIDU	0.	-0.041	0.	0.068	0.13	-14.	61.	-2.	18.	108.	-13.	0.22	19.	0.	-1.	-2.
29111	STM088	COAL-F	0.	-0.041	0.	0.068	0.13	-14.	-25.	-2.	21.	35.	4.	0.12	6.	0.	22.	2.
29111	STM088	COAL-A	0.	-0.041	0.	0.068	0.13	78.	-25.	-2.	113.	35.	4.	0.30	13.	0.	8.	3.

DATE 06/12/79
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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING \$****- - - EMISSIONS SAVINGS - - -										EMSR	CAPITL-- SAVING	-ELECTRIC POWER---				
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****				TOTAL EXPORT MWH	COST LAEC	POWER-- SAVED		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX						PART	
29111	PFBSTM	COAL-P	0.	-0.052	0.	0.079	0.15	90.	-31.	5.	132.	41.	13.	0.36	-1.	0.	38.	1.
29111	PFBSTM	COAL-P	0.	-0.116	0.	0.177	0.26	98.	-69.	12.	192.	91.	29.	0.47	13.	15.	22.	3.
29111	TISTMT	RESIDU	0.	-0.051	0.	0.080	0.15	-18.	57.	-3.	21.	115.	-12.	0.24	-9.	0.	52.	-6.
29111	TISTMT	RESIDU	0.	-0.156	0.	0.246	0.31	-55.	15.	-8.	71.	219.	-6.	0.37	-31.	25.	83.	-9.
29111	TISTMT	COAL	0.	-0.051	0.	0.080	0.15	-18.	-30.	-3.	24.	41.	5.	0.14	-31.	0.	92.	-2.
29111	TISTMT	COAL	0.	-0.156	0.	0.246	0.31	-55.	-93.	-8.	75.	126.	16.	0.29	-55.	25.	64.	-5.
29111	TIHRSG	RESIDU	0.	-0.085	0.	0.045	0.09	-30.	43.	-4.	9.	101.	-15.	0.18	-24.	0.	88.	-9.
29111	TIHRSG	RESIDU	0.	-0.156	0.	0.083	0.13	-54.	15.	-8.	18.	129.	-15.	0.22	-41.	10.	85.	-12.
29111	TIHRSG	COAL	0.	-0.085	0.	0.045	0.09	-30.	-51.	-4.	12.	20.	3.	0.07	-47.	0.	129.	-5.
29111	TIHRSG	COAL	0.	-0.156	0.	0.083	0.13	-54.	-93.	-8.	22.	37.	6.	0.11	-65.	10.	104.	-8.
29111	STIRL	DISTIL	0.	-0.076	0.	0.055	0.11	29.	102.	11.	71.	173.	19.	0.52	13.	0.	20.	-7.
29111	STIRL	DISTIL	0.	-0.265	0.	0.192	0.23	-15.	48.	8.	133.	299.	35.	0.58	24.	31.	32.	-11.
29111	STIRL	RESIDU	0.	-0.076	0.	0.055	0.11	-27.	47.	-9.	12.	105.	-19.	0.19	13.	0.	15.	-3.
29111	STIRL	RESIDU	0.	-0.265	0.	0.192	0.23	-93.	-29.	-31.	49.	202.	-30.	0.27	24.	31.	28.	-5.
29111	STIRL	COAL	0.	-0.076	0.	0.055	0.11	-27.	-45.	-4.	16.	26.	4.	0.09	-6.	0.	49.	0.
29111	STIRL	COAL	0.	-0.265	0.	0.192	0.23	-93.	-159.	-13.	54.	91.	14.	0.20	-6.	31.	38.	-0.
29111	HEGT60	COAL-A	0.	-0.128	0.	0.002	0.00	58.	-77.	-6.	100.	-5.	1.	0.19	-17.	0.	78.	-2.
29111	HEGT60	COAL-A	0.	-1.492	0.	0.028	0.01	-206.	-895.	-75.	283.	-64.	15.	0.13	-28.	130.	47.	-20.
29111	HEGT00	COAL-A	0.	-0.107	0.	0.024	0.05	58.	-64.	-5.	100.	7.	2.	0.21	-15.	0.	70.	-1.
29111	HEGT00	COAL-A	0.	-0.318	0.	0.070	0.09	7.	-191.	-16.	132.	21.	7.	0.21	-15.	24.	49.	-3.
29111	FCMCCL	COAL	0.	-0.061	0.	0.069	0.13	27.	46.	3.	69.	117.	11.	0.39	-13.	0.	62.	-1.
29111	FCMCCL	COAL	0.	-0.311	0.	0.352	0.34	135.	232.	18.	348.	594.	57.	1.00	-3.	50.	35.	-0.
29111	FCSTCL	COAL	0.	-0.059	0.	0.072	0.14	19.	33.	2.	61.	104.	10.	0.35	-12.	0.	60.	-0.
29111	FCSTCL	COAL	0.	-0.415	0.	0.510	0.39	135.	231.	17.	432.	737.	72.	1.00	6.	74.	32.	1.
29111	IGGTST	COAL	0.	-0.075	0.	0.056	0.11	-26.	-45.	3.	16.	27.	11.	0.11	-11.	0.	58.	-0.
29111	IGGTST	COAL	0.	-0.360	0.	0.270	0.27	-126.	-216.	16.	77.	128.	53.	0.27	3.	47.	32.	1.
29111	GTSOAR	RESIDU	-0.465	0.386	-0.465	0.517	0.10	64.	57.	16.	106.	128.	23.	0.51	13.	0.	15.	-3.
29111	GTSOAR	RESIDU	-0.843	0.386	-0.843	1.151	0.27	-76.	-86.	13.	170.	332.	58.	0.51	55.	59.	24.	-5.
29111	GTAC08	RESIDU	0.	-0.061	0.	0.070	0.14	-60.	53.	-7.	-21.	111.	-17.	0.14	17.	0.	2.	-2.
29111	GTAC08	RESIDU	0.	-0.250	0.	0.287	0.31	-247.	-23.	-29.	-79.	252.	-23.	0.17	46.	38.	15.	-1.
29111	GTAC12	RESIDU	0.	-0.062	0.	0.068	0.13	-56.	52.	-7.	-17.	110.	-17.	0.15	14.	0.	9.	-3.
29111	GTAC12	RESIDU	0.	-0.323	0.	0.353	0.33	-290.	-52.	-35.	-78.	297.	-23.	0.19	53.	51.	18.	-1.
29111	GTAC16	RESIDU	0.	-0.065	0.	0.066	0.13	-55.	51.	-7.	-17.	109.	-17.	0.15	14.	0.	10.	-3.
29111	GTAC16	RESIDU	0.	-0.392	0.	0.394	0.34	-332.	-79.	-40.	-85.	327.	-25.	0.19	58.	61.	20.	-2.
29111	GTWC16	RESIDU	0.	-0.069	0.	0.061	0.12	-58.	50.	-7.	-19.	107.	-17.	0.14	13.	0.	12.	-3.
29111	GTWC16	RESIDU	0.	-0.424	0.	0.374	0.32	-351.	-92.	-43.	-100.	320.	-28.	0.17	61.	63.	20.	-3.
29111	CC1626	RESIDU	0.	-0.071	0.	0.060	0.12	-53.	49.	-7.	-15.	107.	-17.	0.15	13.	0.	13.	-3.
29111	CC1626	RESIDU	0.	-0.637	0.	0.536	0.34	-479.	-178.	-59.	-109.	433.	-30.	0.20	82.	98.	23.	-4.
29111	CC1622	RESIDU	0.	-0.068	0.	0.063	0.12	-53.	50.	-6.	-14.	108.	-17.	0.15	14.	0.	12.	-3.
29111	CC1622	RESIDU	0.	-0.548	0.	0.505	0.35	-425.	-142.	-52.	-94.	406.	-27.	0.21	74.	86.	22.	-3.
29111	CC1222	RESIDU	0.	-0.067	0.	0.063	0.12	-53.	50.	-6.	-14.	108.	-17.	0.15	14.	0.	11.	-3.
29111	CC1222	RESIDU	0.	-0.539	0.	0.507	0.35	-420.	-138.	-51.	-91.	406.	-27.	0.21	76.	86.	21.	-3.
29111	CC0822	RESIDU	0.	-0.063	0.	0.068	0.13	-53.	52.	-6.	-14.	110.	-17.	0.16	14.	0.	10.	-3.
29111	CC0822	RESIDU	0.	-0.396	0.	0.428	0.35	-334.	-81.	-41.	-75.	346.	-23.	0.22	63.	65.	19.	-1.
29111	DEHTPM	SIDU	0.	-0.073	0.	0.057	0.11	-115.	48.	-8.	-75.	106.	-18.	0.02	7.	0.	25.	-4.
29111	DEHTPM	SIDU	0.	-0.378	0.	0.295	0.28	-591.	-74.	-39.	-380.	271.	-35.	-0.14	16.	51.	35.	-8.

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GENERAL ELECTRIC COMPANY
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FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING S*****				*****EMISSIONS SAVING S*****				CAPITL--ELECTRIC POWER---			
		ECS DIRECT	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED	
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT		
29111	GTSOAD DISTIL	-0.453	0.386	-0.453	0.517	0.12	99.	158.	19.	138.	216.	9.	0.71
29111	GTSOAD DISTIL	-0.724	0.386	-0.724	1.047	0.31	-9.	114.	19.	198.	454.	29.	0.68
29111	GTRA08 DISTIL	0.	-0.078	0.	0.053	0.10	9.	101.	11.	51.	173.	19.	0.48
29111	GTRA08 DISTIL	0.	-0.766	0.	0.520	0.31	-326.	-93.	-0.	88.	611.	76.	0.49
29111	GTRA12 DISTIL	0.	-0.075	0.	0.056	0.11	9.	102.	11.	51.	173.	19.	0.48
29111	GTRA12 DISTIL	0.	-0.696	0.	0.515	0.32	-298.	-73.	1.	92.	589.	73.	0.50
29111	GTRA16 DISTIL	0.	-0.074	0.	0.057	0.11	9.	102.	11.	51.	174.	19.	0.48
29111	GTRA16 DISTIL	0.	-0.622	0.	0.478	0.32	-268.	-52.	2.	86.	549.	67.	0.50
29111	GTR208 DISTIL	0.	-0.073	0.	0.058	0.11	7.	103.	12.	49.	174.	19.	0.48
29111	GTR208 DISTIL	0.	-0.489	0.	0.386	0.31	-215.	-15.	4.	67.	464.	56.	0.49
29111	GTR212 DISTIL	0.	-0.073	0.	0.058	0.11	8.	103.	12.	50.	174.	19.	0.48
29111	GTR212 DISTIL	0.	-0.525	0.	0.415	0.31	-229.	-25.	4.	73.	489.	59.	0.49
29111	GTR216 DISTIL	0.	-0.072	0.	0.059	0.11	9.	103.	12.	51.	174.	19.	0.48
29111	GTR216 DISTIL	0.	-0.533	0.	0.435	0.32	-233.	-27.	4.	79.	503.	61.	0.50
29111	GTRW08 DISTIL	0.	-0.086	0.	0.045	0.09	6.	99.	11.	48.	171.	19.	0.47
29111	GTRW08 DISTIL	0.	-0.984	0.	0.519	0.27	-413.	-154.	-4.	71.	668.	85.	0.46
29111	GTRW12 DISTIL	0.	-0.081	0.	0.050	0.10	8.	100.	11.	50.	172.	19.	0.48
29111	GTRW12 DISTIL	0.	-0.913	0.	0.565	0.30	-385.	-134.	-3.	91.	675.	85.	0.48
29111	GTRW16 DISTIL	0.	-0.079	0.	0.052	0.10	8.	101.	11.	50.	172.	19.	0.48
29111	GTRW16 DISTIL	0.	-0.805	0.	0.524	0.31	-341.	-103.	-1.	86.	623.	78.	0.49
29111	GTR308 DISTIL	0.	-0.090	0.	0.041	0.08	3.	98.	11.	45.	169.	19.	0.46
29111	GTR308 DISTIL	0.	-0.766	0.	0.350	0.23	-326.	-93.	-0.	33.	518.	66.	0.43
29111	GTR312 DISTIL	0.	-0.077	0.	0.054	0.10	8.	102.	11.	50.	173.	19.	0.48
29111	GTR312 DISTIL	0.	-0.647	0.	0.458	0.31	-278.	-59.	2.	77.	545.	67.	0.49
29111	GTR316 DISTIL	0.	-0.077	0.	0.054	0.10	8.	101.	11.	50.	173.	19.	0.48
29111	GTR316 DISTIL	0.	-0.638	0.	0.447	0.30	-274.	-56.	2.	75.	537.	66.	0.49
29111	FCPADS DISTIL	0.	-0.088	0.	0.043	0.08	30.	129.	13.	72.	201.	21.	0.53
29111	FCPADS DISTIL	0.	-1.546	0.	0.749	0.28	-242.	232.	19.	497.	1487.	155.	0.85
29111	FCMCDS DISTIL	0.	-0.074	0.	0.057	0.11	-24.	131.	12.	18.	202.	19.	0.47
29111	FCMCDS DISTIL	0.	-1.023	0.	0.792	0.36	-929.	230.	-2.	-345.	1223.	106.	0.47
29112	STM141 RESIDU	0.	-0.183	0.	0.303	0.16	-64.	20.	-9.	81.	421.	-43.	0.25
29112	STM141 RESIDU	0.	-0.212	0.	0.352	0.18	-74.	190.	-11.	95.	451.	-41.	0.27
29112	STM141 COAL-F	0.	-0.183	0.	0.303	0.16	-64.	-110.	-9.	92.	156.	20.	0.15
29112	STM141 COAL-F	0.	-0.212	0.	0.352	0.18	-74.	-127.	-11.	107.	181.	23.	0.16
29112	STM141 COAL-A	0.	-0.183	0.	0.303	0.16	271.	-110.	-9.	427.	156.	20.	0.33
29112	STM141 COAL-A	0.	-0.212	0.	0.352	0.18	267.	-127.	-11.	448.	181.	23.	0.34
29112	STM088 RESIDU	0.	-0.140	0.	0.231	0.12	-49.	219.	-7.	59.	376.	-46.	0.21
29112	STM088 COAL-F	0.	-0.140	0.	0.231	0.12	-49.	-84.	-7.	70.	119.	15.	0.11
29112	STM088 COAL-A	0.	-0.140	0.	0.231	0.12	277.	-84.	-7.	396.	119.	15.	0.29
29112	PFBSTM COAL-P	0.	-0.192	0.	0.293	0.16	320.	-115.	20.	476.	150.	49.	0.37
29112	PFBSTM COAL-P	0.	-0.404	0.	0.617	0.26	347.	-242.	42.	676.	316.	102.	0.47
29112	TISTMT RESIDU	0.	-0.188	0.	0.297	0.16	-66.	199.	-9.	79.	418.	-43.	0.25
29112	TISTMT RESIDU	0.	-0.545	0.	0.860	0.31	-191.	57.	-27.	247.	768.	-21.	0.37
29112	TISTMT COAL	0.	-0.188	0.	0.297	0.16	-66.	-113.	-9.	90.	153.	19.	0.14
29112	TISTMT COAL	0.	-0.545	0.	0.860	0.31	-191.	-327.	-27.	261.	441.	56.	0.28
29112	TIHRSG RESIDU	0.	-0.317	0.	0.169	0.09	-111.	148.	-16.	33.	363.	-55.	0.19

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GENERAL ELECTRIC COMPANY

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****								CAPITL--ELECTRIC POWER---			
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		*****TOTAL*****		EMSR	SAVING	TOTAL	COST
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT	LAEC	SAVED
															MWH		
29112	TIHRSG	RESIDU	0.	-0.553	0.	0.294	0.13	-194.	54.	-28.	65.	459.	-55.	0.22	-76.	34.	65.
29112	TIHRSG	COAL	0.	-0.317	0.	0.169	0.09	-111.	-190.	-16.	45.	75.	13.	0.07	-94.	0.	85.
29112	TIHRSG	COAL	0.	-0.553	0.	0.294	0.13	-194.	-332.	-28.	79.	132.	23.	0.11	-137.	34.	76.
29112	STIRL	DISTIL	0.	-0.282	0.	0.204	0.11	100.	358.	41.	256.	624.	69.	0.52	42.	0.	22.
29112	STIRL	DISTIL	0.	-0.943	0.	0.683	0.23	-52.	172.	29.	471.	1061.	126.	0.58	83.	107.	33.
29112	STIRL	RESIDU	0.	-0.282	0.	0.204	0.11	-99.	162.	-32.	45.	378.	-70.	0.19	42.	0.	18.
29112	STIRL	RESIDU	0.	-0.943	0.	0.683	0.23	-330.	-102.	-109.	176.	717.	-105.	0.27	83.	107.	28.
29112	STIRL	COAL	0.	-0.282	0.	0.204	0.11	-99.	-169.	-14.	58.	97.	15.	0.09	-11.	0.	41.
29112	STIRL	COAL	0.	-0.943	0.	0.683	0.23	-330.	-566.	-47.	193.	324.	49.	0.20	-22.	107.	37.
29112	HEGT60	COAL-A	0.	-0.477	0.	0.009	0.00	203.	-286.	-24.	359.	-20.	5.	0.19	-29.	0.	58.
29112	HEGT60	COAL-A	0.	-5.304	0.	0.101	0.01	-731.	-3182.	-265.	1008.	-226.	55.	0.13	-5.	461.	43.
29112	HEGT00	COAL-A	0.	-0.398	0.	0.087	0.05	201.	-239.	-20.	357.	27.	9.	0.21	-12.	0.	46.
29112	HEGT00	COAL-A	0.	-1.129	0.	0.247	0.09	27.	-677.	-56.	469.	75.	25.	0.21	19.	84.	36.
29112	FCMCCL	COAL	0.	-0.228	0.	0.258	0.14	99.	170.	13.	253.	435.	42.	0.40	-12.	0.	41.
29112	FCMCCL	COAL	0.	-1.107	0.	1.250	0.34	480.	823.	62.	1238.	2112.	202.	1.00	67.	175.	27.
29112	FCSTCL	COAL	0.	-0.218	0.	0.268	0.14	72.	123.	9.	228.	388.	38.	0.36	-10.	0.	39.
29112	FCSTCL	COAL	0.	-1.462	0.	1.794	0.39	479.	823.	62.	1527.	2604.	254.	1.00	111.	260.	25.
29112	IGGTST	COAL	0.	-0.278	0.	0.207	0.11	-97.	-167.	12.	59.	99.	41.	0.11	-3.	0.	35.
29112	IGGTST	COAL	0.	-1.268	0.	0.944	0.26	-444.	-761.	55.	268.	449.	186.	0.26	61.	162.	26.
29112	GTSOAR	RESIDU	-1.664	1.374	-1.664	1.859	0.11	223.	198.	55.	379.	463.	84.	0.51	61.	0.	9.
29112	GTSOAR	RESIDU	-2.998	1.374	-2.998	4.090	0.27	-269.	-304.	45.	605.	1181.	206.	0.51	200.	209.	23.
29112	GTAC08	RESIDU	0.	-0.226	0.	0.259	0.14	-223.	184.	-27.	-79.	402.	-62.	0.14	64.	0.	2.
29112	GTAC08	RESIDU	0.	-0.890	0.	1.020	0.31	-877.	-81.	-104.	-280.	695.	-82.	0.17	165.	134.	15.
29112	GTAC12	RESIDU	0.	-0.232	0.	0.254	0.14	-209.	182.	-25.	-64.	399.	-61.	0.15	63.	0.	4.
29112	GTAC12	RESIDU	0.	-1.148	0.	1.256	0.33	-1032.	-184.	-124.	-278.	1054.	-83.	0.19	191.	180.	18.
29112	GTAC16	RESIDU	0.	-0.242	0.	0.243	0.13	-205.	178.	-25.	-61.	395.	-61.	0.15	61.	0.	5.
29112	GTAC16	RESIDU	0.	-1.393	0.	1.400	0.34	-1179.	-282.	-143.	-301.	1162.	-88.	0.19	205.	216.	20.
29112	GTWC16	RESIDU	0.	-0.258	0.	0.228	0.12	-214.	172.	-26.	-70.	388.	-62.	0.14	62.	0.	6.
29112	GTWC16	RESIDU	0.	-1.506	0.	1.329	0.32	-1247.	-328.	-152.	-357.	1136.	-93.	0.17	223.	220.	20.
29112	CC1626	RESIDU	0.	-0.264	0.	0.222	0.12	-199.	169.	-24.	-55.	386.	-61.	0.15	62.	0.	6.
29112	CC1626	RESIDU	0.	-2.247	0.	1.885	0.34	-1692.	-624.	-208.	-390.	1527.	-109.	0.20	303.	342.	22.
29112	CC1622	RESIDU	0.	-0.253	0.	0.233	0.13	-197.	174.	-24.	-53.	390.	-60.	0.15	61.	0.	6.
29112	CC1622	RESIDU	0.	-1.932	0.	1.777	0.35	-1502.	-498.	-184.	-334.	1431.	-97.	0.21	263.	302.	21.
29112	CC1222	RESIDU	0.	-0.251	0.	0.235	0.13	-196.	174.	-24.	-52.	391.	-60.	0.15	62.	0.	5.
29112	CC1222	RESIDU	0.	-1.901	0.	1.781	0.35	-1484.	-486.	-182.	-324.	1430.	-95.	0.21	270.	300.	21.
29112	CC0822	RESIDU	0.	-0.234	0.	0.252	0.14	-198.	181.	-24.	-54.	399.	-60.	0.16	63.	0.	4.
29112	CC0822	RESIDU	0.	-1.394	0.	1.504	0.35	-1130.	-283.	-143.	-268.	1219.	-82.	0.21	232.	226.	18.
29112	DEHTPM	RESIDU	0.	-0.273	0.	0.213	0.11	-427.	166.	-28.	-283.	382.	-65.	0.02	33.	0.	22.
29112	DEHTPM	RESIDU	0.	-1.342	0.	1.047	0.28	-2099.	-262.	-139.	-1351.	963.	-106.	0.14	57.	179.	35.
29112	GTSOAD	DISTIL	-1.622	1.374	-1.622	1.859	0.13	347.	561.	69.	491.	778.	33.	0.71	65.	0.	8.
29112	GTSOAD	DISTIL	-2.573	1.374	-2.573	3.722	0.31	-34.	406.	69.	702.	1613.	105.	0.68	194.	175.	22.
29112	GTRA08	DISTIL	0.	-0.289	0.	0.196	0.11	24.	356.	40.	181.	622.	69.	0.48	59.	0.	14.
29112	GTRA08	DISTIL	0.	-2.723	0.	1.848	0.31	-1158.	-329.	-1.	313.	2171.	270.	0.49	297.	383.	30.
29112	GTRA12	DISTIL	0.	-0.279	0.	0.207	0.11	27.	359.	41.	163.	625.	69.	0.48	59.	0.	14.
29112	GTRA12	DISTIL	0.	-2.473	0.	1.631	0.32	-1058.	-7.	3.	327.	2095.	258.	0.50	280.	358.	30.
29112	GTRA12	DISTIL	0.	-0.275	0.	0.211	0.11	26.	359.	41.	182.	626.	69.	0.48	58.	0.	14.

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ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 59

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS***** - - - EMISSIONS SAVINGS - - -										CAPITL--ELECTRIC POWER--						
		ECS ****DIRECT*****		TOTAL-----		FESR -----		DIRECT-----		*****TOTAL*****		EMSR SAVING	TOTAL EXPORT	COST LAEC				
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART								
															MWH			
29112	GTRA16	DISTIL	0.	-2.210	0.	1.699	0.32	-953.	-184.	8.	305.	1953.	239.	0.50	249.	321.	29.	-49.
29112	GTR208	DISTIL	0.	-0.271	0.	0.214	0.12	20.	361.	41.	176.	627.	69.	0.48	61.	0.	12.	-23.
29112	GTR208	DISTIL	0.	-1.738	0.	1.374	0.31	-764.	-52.	16.	237.	1650.	200.	0.49	225.	246.	27.	-39.
29112	GTR212	DISTIL	0.	-0.271	0.	0.214	0.12	22.	361.	41.	179.	627.	69.	0.48	60.	0.	12.	-23.
29112	GTR212	DISTIL	0.	-1.866	0.	1.475	0.31	-815.	-88.	14.	260.	1739.	211.	0.49	235.	268.	27.	-41.
29112	GTR216	DISTIL	0.	-0.267	0.	0.218	0.12	25.	362.	41.	181.	628.	70.	0.48	59.	0.	12.	-23.
29112	GTR216	DISTIL	0.	-1.895	0.	1.547	0.32	-827.	-96.	13.	281.	1787.	217.	0.50	233.	277.	28.	-42.
29112	GTRW08	DISTIL	0.	-0.318	0.	0.168	0.09	16.	348.	40.	173.	614.	69.	0.47	57.	0.	18.	-26.
29112	GTRW08	DISTIL	0.	-3.496	0.	1.846	0.27	-1467.	-547.	-14.	251.	2375.	302.	0.46	375.	455.	32.	-75.
29112	GTRW12	DISTIL	0.	-0.300	0.	0.186	0.10	23.	353.	40.	180.	619.	69.	0.48	57.	0.	16.	-25.
29112	GTRW12	DISTIL	0.	-3.246	0.	2.009	0.30	-1367.	-476.	-10.	324.	2398.	301.	0.48	370.	447.	30.	-65.
29112	GTRW16	DISTIL	0.	-0.294	0.	0.192	0.10	23.	355.	40.	179.	620.	69.	0.48	59.	0.	14.	-24.
29112	GTRW16	DISTIL	0.	-2.860	0.	1.663	0.31	-1213.	-368.	-3.	307.	2216.	276.	0.49	329.	397.	30.	-59.
29112	GTR308	DISTIL	0.	-0.333	0.	0.152	0.08	3.	344.	40.	159.	609.	68.	0.46	61.	0.	17.	-26.
29112	GTR308	DISTIL	0.	-2.723	0.	1.246	0.23	-1158.	-329.	-1.	119.	1841.	234.	0.43	287.	327.	32.	-66.
29112	GTR312	DISTIL	0.	-0.285	0.	0.201	0.11	22.	357.	40.	178.	623.	69.	0.48	61.	0.	13.	-24.
29112	GTR312	DISTIL	0.	-2.300	0.	1.626	0.31	-989.	-210.	6.	275.	1937.	239.	0.49	284.	323.	28.	-48.
29112	GTR316	DISTIL	0.	-0.285	0.	0.200	0.11	21.	357.	40.	178.	623.	69.	0.48	60.	0.	13.	-24.
29112	GTR316	DISTIL	0.	-2.267	0.	1.590	0.30	-976.	-201.	7.	265.	1909.	235.	0.49	275.	316.	28.	-49.
29112	FCPADS	DISTIL	0.	-0.327	0.	0.158	0.09	104.	461.	47.	260.	726.	75.	0.58	41.	0.	37.	-33.
29112	FCPADS	DISTIL	0.	-5.495	0.	2.662	0.28	-859.	824.	69.	1766.	5285.	552.	0.85	317.	719.	51.	-227.
29112	FCMCDs	DISTIL	0.	-0.274	0.	0.212	0.11	-96.	466.	41.	60.	732.	70.	0.47	40.	0.	33.	-30.
29112	FCMCDs	DISTIL	0.	-3.638	0.	2.815	0.36	-3303.	817.	-6.	-1227.	4346.	376.	0.47	233.	560.	46.	-150.
29113	STM141	RESIDU	0.	-0.443	0.	0.734	0.17	-155.	450.	-22.	197.	986.	-96.	0.26	168.	0.	-3.	-10.
29113	STM141	RESIDU	0.	-0.513	0.	0.850	0.19	-180.	422.	-26.	232.	1058.	-91.	0.27	188.	17.	-2.	-8.
29113	STM141	COAL-F	0.	-0.443	0.	0.734	0.17	-155.	-266.	-22.	224.	378.	48.	0.15	67.	0.	16.	27.
29113	STM141	COAL-F	0.	-0.513	0.	0.850	0.19	-180.	-308.	-26.	259.	438.	55.	0.17	78.	17.	15.	30.
29113	STM141	COAL-A	0.	-0.443	0.	0.734	0.17	614.	-266.	-22.	993.	378.	48.	0.34	118.	0.	6.	33.
29113	STM141	COAL-A	0.	-0.513	0.	0.850	0.19	605.	-308.	-26.	1043.	438.	55.	0.35	139.	17.	5.	37.
29113	STM088	RESIDU	0.	-0.345	0.	0.572	0.13	-121.	489.	-17.	148.	886.	-102.	0.22	162.	0.	3.	-14.
29113	STM088	COAL-F	0.	-0.345	0.	0.572	0.13	-121.	-207.	-17.	174.	294.	37.	0.12	64.	0.	19.	23.
29113	STM088	COAL-A	0.	-0.345	0.	0.572	0.13	627.	-207.	-17.	922.	294.	37.	0.30	108.	0.	11.	28.
29113	PFBSTM	COAL-P	0.	-0.464	0.	0.713	0.17	731.	-279.	47.	1110.	365.	116.	0.38	94.	0.	14.	27.
29113	PFBSTM	COAL-P	0.	-0.951	0.	1.460	0.26	791.	-571.	95.	1567.	748.	238.	0.48	183.	116.	14.	37.
29113	TISTMT	RESIDU	0.	-0.456	0.	0.721	0.17	-160.	445.	-23.	192.	981.	-97.	0.25	17.	0.	29.	-31.
29113	TISTMT	RESIDU	0.	-1.278	0.	2.020	0.31	-447.	116.	-64.	581.	1787.	-45.	0.37	-117.	199.	43.	-57.
29113	TISTMT	COAL	0.	-0.456	0.	0.721	0.17	-160.	-274.	-23.	219.	370.	47.	0.15	-84.	0.	48.	7.
29113	TISTMT	COAL	0.	-1.278	0.	2.020	0.31	-447.	-767.	-64.	614.	1037.	131.	0.29	-265.	199.	50.	-13.
29113	TIHRSG	RESIDU	0.	-0.768	0.	0.409	0.09	-269.	320.	-38.	80.	846.	-125.	0.19	-100.	0.	63.	-57.
29113	TIHRSG	RESIDU	0.	-1.262	0.	0.671	0.13	-442.	122.	-63.	147.	1048.	-125.	0.22	-212.	71.	70.	-81.
29113	TIHRSG	COAL	0.	-0.768	0.	0.409	0.09	-269.	-461.	-38.	110.	183.	31.	0.08	-228.	0.	84.	-19.
29113	TIHRSG	COAL	0.	-1.262	0.	0.671	0.13	-442.	-757.	-63.	180.	300.	51.	0.11	-360.	71.	82.	-39.
29113	STIRL	DISTIL	0.	-0.682	0.	0.494	0.11	219.	806.	92.	598.	1450.	162.	0.52	102.	0.	23.	-59.
29113	STIRL	DISTIL	0.	-2.151	0.	1.559	0.23	-119.	393.	67.	1075.	2422.	287.	0.58	201.	238.	32.	-85.
29113	STIRL	RESIDU	0.	-0.682	0.	0.494	0.11	-239.	354.	-79.	111.	883.	-162.	0.20	101.	0.	18.	-28.
29113	STIRL	RESIDU	0.	-2.151	0.	1.559	0.23	-753.	-234.	-248.	401.	1637.	-239.	0.27	201.	238.	27.	-41.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVINGS*****- - EMISSIONS SAVINGS - - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****				TOTAL-----FESR-----				DIRECT-----*****TOTAL*****				EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED	
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART						
29113	STIRL	COAL	0.	-0.682	0.	0.494	0.11	-239.	-409.	-34.	140.	234.	36.	0.10	-27.	0.	40.	10.
29113	STIRL	COAL	0.	-2.151	0.	1.559	0.23	-753.	-1291.	-108.	441.	738.	112.	0.20	-39.	238.	36.	4.
29113	HEGT60	COAL-A	0.	-1.155	0.	0.022	0.01	451.	-693.	-58.	829.	-49.	12.	0.19	-18.	0.	47.	0.
29113	HEGT60	COAL-A	0.	-12.104	0.	0.230	0.01	-1669.	-7262.	-605.	2300.	-517.	125.	0.13	-55.	1046.	44.	-136.
29113	HEGT00	COAL-A	0.	-0.965	0.	0.212	0.05	444.	-579.	-48.	823.	64.	21.	0.21	12.	0.	37.	8.
29113	HEGT00	COAL-A	0.	-2.577	0.	0.565	0.09	61.	-1546.	-129.	1071.	172.	57.	0.21	49.	184.	36.	-3.
29113	FCMCCL	COAL	0.	-0.553	0.	0.624	0.14	240.	411.	31.	618.	1055.	101.	0.42	-4.	0.	35.	12.
29113	FCMCCL	COAL	0.	-2.526	0.	2.852	0.34	1094.	1878.	143.	2825.	4819.	461.	1.00	261.	394.	22.	38.
29113	FCSTCL	COAL	0.	-0.528	0.	0.649	0.15	170.	293.	22.	549.	936.	92.	0.37	-1.	0.	34.	14.
29113	FCSTCL	COAL	0.	-3.387	0.	4.165	0.39	1994.	1878.	140.	3524.	6008.	588.	1.00	384.	598.	20.	55.
29113	IGGTST	COAL	0.	-0.672	0.	0.505	0.12	-235.	-403.	29.	144.	241.	99.	0.11	13.	0.	31.	16.
29113	IGGTST	COAL	0.	-2.940	0.	2.212	0.27	-1029.	-1764.	126.	629.	1054.	431.	0.27	190.	373.	23.	34.
29113	GTSGAR	RESIDU	-3.839	3.135	-3.839	4.312	0.11	493.	436.	126.	872.	1079.	196.	0.51	139.	0.	10.	-23.
29113	GTSGAR	RESIDU	-6.841	3.135	-6.841	9.335	0.27	-613.	-695.	102.	1382.	2696.	469.	0.51	470.	471.	23.	-36.
29113	GTAC08	RESIDU	0.	-0.548	0.	0.629	0.13	-541.	406.	-64.	-190.	941.	-142.	0.14	153.	0.	3.	-16.
29113	GTAC08	RESIDU	0.	-2.030	0.	2.328	0.31	-2002.	-185.	-238.	-638.	2043.	-187.	0.17	388.	298.	15.	-5.
29113	GTAC12	RESIDU	0.	-0.562	0.	0.615	0.14	-505.	405.	-61.	-155.	935.	-139.	0.15	149.	0.	4.	-17.
29113	GTAC12	RESIDU	0.	-2.620	0.	2.865	0.33	-2356.	-421.	-284.	-634.	2406.	-189.	0.19	449.	404.	17.	-7.
29113	GTAC16	RESIDU	0.	-0.587	0.	0.590	0.14	-497.	392.	-60.	-146.	924.	-139.	0.15	143.	0.	6.	-18.
29113	GTAC16	RESIDU	0.	-3.178	0.	3.194	0.34	-2691.	-644.	-326.	-668.	2651.	-201.	0.19	488.	487.	19.	-13.
29113	GTWC16	RESIDU	0.	-0.625	0.	0.552	0.13	-518.	377.	-63.	-167.	908.	-144.	0.14	147.	0.	7.	-19.
29113	GTWC16	RESIDU	0.	-3.437	0.	3.032	0.32	-2846.	-748.	-345.	-814.	2593.	-226.	0.17	531.	496.	19.	-16.
29113	CC1626	RESIDU	0.	-0.639	0.	0.538	0.12	-480.	372.	-59.	-129.	902.	-140.	0.15	146.	0.	7.	-20.
29113	CC1626	RESIDU	0.	-5.194	0.	4.376	0.34	-3900.	-1451.	-480.	-884.	3533.	-247.	0.20	729.	787.	21.	-22.
29113	CC1622	RESIDU	0.	-0.612	0.	0.565	0.13	-474.	382.	-58.	-124.	914.	-138.	0.15	143.	0.	7.	-20.
29113	CC1622	RESIDU	0.	-4.466	0.	4.126	0.35	-3463.	-1159.	-425.	-756.	3312.	-220.	0.21	628.	695.	21.	-19.
29113	CC1222	RESIDU	0.	-0.606	0.	0.571	0.13	-472.	384.	-58.	-121.	916.	-138.	0.16	146.	0.	6.	-19.
29113	CC1222	RESIDU	0.	-4.397	0.	4.138	0.35	-3422.	-1132.	-419.	-733.	3310.	-215.	0.21	643.	690.	20.	-16.
29113	CC0822	RESIDU	0.	-0.565	0.	0.612	0.14	-476.	401.	-58.	-125.	934.	-136.	0.16	148.	0.	5.	-17.
29113	CC0822	RESIDU	0.	-3.231	0.	3.501	0.35	-2722.	-665.	-330.	-604.	2825.	-186.	0.22	545.	521.	17.	-5.
29113	DEHTPM	RESIDU	0.	-0.661	0.	0.516	0.12	-1034.	363.	-69.	-684.	892.	-151.	0.01	76.	0.	23.	-30.
29113	DEHTPM	RESIDU	0.	-3.063	0.	2.389	0.28	-4791.	-598.	-317.	-3083.	2198.	-243.	-0.14	151.	401.	34.	-63.
29113	GTSGAD	DISTIL	-3.736	3.135	-3.736	4.312	0.13	778.	1274.	157.	1129.	1805.	77.	0.71	152.	0.	9.	-49.
29113	GTSGAD	DISTIL	-5.872	3.135	-5.872	8.493	0.31	-77.	927.	157.	1603.	3681.	239.	0.68	464.	392.	21.	-59.
29113	GTRA08	DISTIL	0.	-0.701	0.	0.476	0.11	36.	801.	92.	414.	1445.	161.	0.48	136.	0.	16.	-55.
29113	GTRA08	DISTIL	0.	-6.215	0.	4.216	0.31	-2643.	-751.	-2.	713.	4954.	615.	0.49	700.	868.	30.	-130.
29113	GTRA12	DISTIL	0.	-0.676	0.	0.501	0.12	42.	808.	92.	420.	1452.	162.	0.48	139.	0.	14.	-53.
29113	GTRA12	DISTIL	0.	-5.643	0.	4.177	0.32	-2414.	-590.	8.	746.	4781.	589.	0.50	663.	811.	29.	-116.
29113	GTRA16	DISTIL	0.	-0.665	0.	0.511	0.12	40.	811.	92.	418.	1455.	162.	0.48	137.	0.	14.	-53.
29113	GTRA16	DISTIL	0.	-5.043	0.	3.876	0.32	-2174.	-421.	18.	696.	4457.	546.	0.50	594.	726.	29.	-108.
29113	GTR208	DISTIL	0.	-0.657	0.	0.520	0.12	25.	813.	92.	404.	1457.	162.	0.48	139.	0.	13.	-53.
29113	GTR208	DISTIL	0.	-3.966	0.	3.135	0.31	-1743.	-118.	36.	541.	3766.	456.	0.49	527.	556.	26.	-87.
29113	GTR212	DISTIL	0.	-0.657	0.	0.520	0.12	31.	813.	92.	410.	1457.	162.	0.48	142.	0.	13.	-52.
29113	GTR212	DISTIL	0.	-4.258	0.	3.366	0.31	-1860.	-200.	31.	593.	3970.	482.	0.49	552.	605.	27.	-92.
29113	GTR21	DISTIL	0.	-0.648	0.	0.529	0.12	37.	81.	92.	416.	1460.	162.	0.48	139.	0.	13.	-52.
29113	GTR21	DISTIL	0.	-4.324	0.	3.531	0.32	-1887.	-215.	30.	641.	4078.	495.	0.50	548.	626.	27.	-93.

HONEYWELL PAGE PRINTING SYSTEM - FILE 88

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 61

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 5.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

		*****FUEL SAVING \$*****				- - EMISSIONS SAVING \$ - - -				CAPITL--ELECTRIC POWER--								
PROCS	ECS	ECS *****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	CCST	LAEC	SAVED						
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPRT	MWH						
29113	GTRW08	DISTIL	0.	-0.770	0.	0.407	0.09	17.	782.	90.	395.	1425.	160.	0.47	142.	0.	17.	-57.
29113	GTRW08	DISTIL	0.	-7.978	0.	4.212	0.27	-3348.	-1247.	-32.	574.	5419.	689.	0.46	865.	1033.	31.	-169.
29113	GTRW12	DISTIL	0.	-0.727	0.	0.450	0.10	33.	794.	91.	412.	1438.	161.	0.48	142.	0.	16.	-55.
29113	GTRW12	DISTIL	0.	-7.407	0.	4.585	0.30	-3120.	-1087.	-22.	738.	5472.	687.	0.48	860.	1014.	30.	-146.
29113	GTRW16	DISTIL	0.	-0.713	0.	0.464	0.11	33.	798.	91.	412.	1442.	161.	0.48	138.	0.	16.	-55.
29113	GTRW16	DISTIL	0.	-6.527	0.	4.252	0.31	-2768.	-839.	-8.	700.	5036.	631.	0.49	773.	901.	29.	-131.
29113	GTR308	DISTIL	0.	-0.807	0.	0.369	0.09	-16.	771.	90.	363.	1415.	159.	0.46	147.	0.	17.	-58.
29113	GTR308	DISTIL	0.	-6.213	0.	2.843	0.23	-2642.	-750.	-2.	272.	4202.	534.	0.43	683.	739.	31.	-147.
29113	GTR312	DISTIL	0.	-0.689	0.	0.487	0.11	30.	804.	92.	409.	1448.	161.	0.48	145.	0.	13.	-53.
29113	GTR312	DISTIL	0.	-5.249	0.	3.711	0.31	-2256.	-479.	14.	626.	4421.	545.	0.49	674.	730.	27.	-106.
29113	GTR316	DISTIL	0.	-0.692	0.	0.485	0.11	28.	804.	92.	407.	1447.	161.	0.48	144.	0.	14.	-54.
29113	GTR316	DISTIL	0.	-5.174	0.	3.628	0.30	-2227.	-458.	15.	606.	4356.	537.	0.49	652.	715.	28.	-107.
29113	FCPADS	DISTIL	0.	-0.793	0.	0.384	0.09	229.	1054.	107.	607.	1698.	176.	0.59	98.	0.	38.	-76.
29113	FCPADS	DISTIL	0.	-12.540	0.	6.074	0.28	-1959.	1881.	157.	4029.	12061.	1259.	0.85	754.	1635.	51.	-513.
29113	FCMCDS	DISTIL	0.	-0.664	0.	0.513	0.12	-256.	1068.	94.	122.	1711.	164.	0.47	93.	0.	34.	-70.
29113	FCMCDS	DISTIL	0.	-8.302	0.	6.423	0.36	-7538.	1864.	-15.	-2800.	9917.	857.	0.47	549.	1271.	46.	-339.
29	FCMCDS	DISTIL	-31.629	*****	-31.629	249.662	8.84	*****	-5367.	-4218.	52332.	270818.	17709.	0.41	29675.	34293.	6862.	-6159.
33121	STM141	RESIDU	0.	-0.008	0.	0.013	0.03	-19.	11.	-0.	-12.	21.	-2.	0.01	4.	0.	60.	-0.
33121	STM141	COAL-F	0.	-0.008	0.	0.013	0.03	-19.	-5.	-0.	-12.	7.	1.	-0.01	-1.	0.	49.	0.
33121	STM141	COAL-A	0.	-0.008	0.	0.013	0.03	-1.	-5.	-0.	-12.	7.	1.	0.03	1.	0.	48.	0.
33121	STM088	RESIDU	0.	-0.004	0.	0.007	0.01	-17.	13.	-0.	-14.	17.	-3.	0.00	4.	0.	60.	-0.
33121	STM088	COAL-F	0.	-0.004	0.	0.007	0.01	-17.	-3.	-0.	-14.	4.	0.	-0.02	-1.	0.	50.	-0.
33121	STM088	COAL-A	0.	-0.004	0.	0.007	0.01	-1.	-3.	-0.	-14.	4.	0.	0.02	1.	0.	49.	0.
33121	PFBSTM	COAL-P	0.	-0.018	0.	0.027	0.05	3.	-11.	2.	18.	14.	5.	0.08	-1.	0.	49.	0.
33121	TISTMT	RESIDU	0.	-0.025	0.	0.039	0.08	-25.	5.	-1.	-5.	37.	-1.	0.07	-16.	0.	69.	-3.
33121	TISTMT	COAL	0.	-0.025	0.	0.039	0.08	-25.	-15.	-1.	-4.	20.	3.	0.04	-24.	0.	62.	-2.
33121	TIHRSG	RESIDU	0.	-0.028	0.	0.017	0.03	-26.	3.	-1.	-12.	25.	-3.	0.02	-17.	0.	72.	-3.
33121	TIHRSG	COAL	0.	-0.028	0.	0.017	0.03	-26.	-17.	-1.	-11.	8.	1.	-0.01	-26.	0.	64.	-3.
33121	STIRL	DISTIL	0.	-0.052	0.	0.038	0.08	-19.	9.	2.	10.	58.	7.	0.17	7.	0.	83.	-1.
33121	STIRL	RESIDU	0.	-0.052	0.	0.038	0.08	-34.	-6.	-6.	-6.	40.	-6.	0.06	7.	0.	56.	0.
33121	STIRL	COAL	0.	-0.052	0.	0.038	0.08	-34.	-31.	-3.	-5.	18.	3.	0.04	-0.	0.	48.	1.
33121	HEGT60	COAL-A	0.	-0.235	0.	0.015	0.03	-46.	-141.	-12.	34.	-5.	3.	0.07	-26.	0.	64.	-3.
33121	HEGT00	COAL-A	0.	-0.059	0.	0.014	0.03	-14.	-35.	-3.	9.	4.	1.	0.03	-11.	0.	55.	-1.
33121	FCMCCL	COAL	0.	-0.059	0.	0.067	0.13	10.	44.	3.	50.	113.	11.	0.38	-9.	0.	52.	-0.
33121	FCSTCL	COAL	0.	-0.072	0.	0.088	0.17	10.	44.	3.	61.	131.	13.	0.45	-9.	0.	51.	0.
33121	IGGTST	COAL	0.	-0.062	0.	0.044	0.09	-38.	-37.	3.	-3.	21.	9.	0.06	-9.	0.	52.	-0.
33121	GTSUAR	RESIDU	-0.157	0.073	-0.157	0.215	0.12	-29.	-15.	2.	16.	63.	11.	0.20	12.	0.	51.	1.
33121	GTAC08	RESIDU	0.	-0.047	0.	0.054	0.11	-63.	-4.	-6.	-31.	48.	-4.	0.03	10.	0.	53.	1.
33121	GTAC12	RESIDU	0.	-0.061	0.	0.067	0.13	-71.	-10.	-7.	-31.	56.	-4.	0.05	12.	0.	50.	1.
33121	GTAC16	RESIDU	0.	-0.074	0.	0.075	0.15	-78.	-15.	-8.	-32.	62.	-5.	0.06	13.	0.	49.	1.
33121	GTVC16	RESIDU	0.	-0.080	0.	0.071	0.14	-82.	-18.	-8.	-35.	61.	-5.	0.05	13.	0.	50.	1.
33121	CC1626	RESIDU	0.	-0.112	0.	0.092	0.18	-102.	-30.	-11.	-37.	76.	-6.	0.07	17.	0.	46.	1.
33121	CC1622	RESIDU	0.	-0.096	0.	0.087	0.17	-92.	-24.	-9.	-34.	71.	-5.	0.07	15.	0.	47.	1.
33121	CC1222	RESIDU	0.	-0.095	0.	0.087	0.17	-91.	-23.	-9.	-34.	71.	-5.	0.07	16.	0.	47.	1.
33121	CC0822	RESIDU	0.	-0.069	0.	0.072	0.14	-75.	-13.	-7.	-31.	60.	-5.	0.05	13.	0.	50.	1.
33121	DEADV3	RESIDU	0.	-0.293	0.	0.132	0.26	-338.	-102.	-24.	-204.	119.	-14.	-0.22	15.	0.	43.	-1.

MONEYWELL PAGE PRINTING SYSTEM - P1102-02

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 62

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1
TIME 1990

FUEL AND EMISSIONS SAVINGS
LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS***** - - - EMISSIONS SAVINGS - - -												CAPITL--ELECTRIC POWER---				
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
33121	DEHTPM	RESIDU	0.	-0.072	0.	0.061	0.12	-128.	-14.	-7.	-87.	54.	-5.	-0.08	5.	0.	55.	-0.
33121	DESOA3	DISTIL	-0.392	0.073	-0.392	0.502	0.22	-712.	-20.	4.	-577.	203.	13.	-0.79	4.	0.	58.	-6.
33121	DESOA3	DISTIL	-0.457	0.073	-0.457	0.589	0.22	-859.	-30.	4.	-696.	238.	16.	-0.83	5.	8.	57.	-8.
33121	DESOA3	RESIDU	-0.392	0.073	-0.392	0.502	0.22	-1530.	-104.	1.	-1392.	131.	26.	-2.71	4.	0.	52.	-3.
33121	DESOA3	RESIDU	-0.457	0.073	-0.457	0.589	0.22	-1842.	-128.	0.	-1676.	154.	31.	-2.78	5.	8.	51.	-5.
33121	GTSOAR	DISTIL	-0.137	0.073	-0.137	0.198	0.12	-18.	22.	4.	22.	86.	6.	0.25	13.	0.	57.	-0.
33121	GTRA08	DISTIL	0.	-0.136	0.	0.098	0.19	-74.	-15.	0.	1.	113.	14.	0.28	18.	0.	51.	-0.
33121	GTRA12	DISTIL	0.	-0.125	0.	0.097	0.19	-70.	-12.	0.	2.	110.	13.	0.27	17.	0.	51.	-0.
33121	GTRA16	DISTIL	0.	-0.113	0.	0.096	0.18	-65.	-8.	0.	1.	103.	13.	0.25	15.	0.	53.	-0.
33121	GTR208	DISTIL	0.	-0.090	0.	0.073	0.15	-55.	-2.	1.	-3.	87.	11.	0.21	14.	0.	56.	-0.
33121	GTR212	DISTIL	0.	-0.097	0.	0.079	0.16	-58.	-4.	1.	-2.	92.	11.	0.22	14.	0.	55.	-0.
33121	GTR216	DISTIL	0.	-0.098	0.	0.082	0.16	-59.	-4.	1.	-1.	94.	11.	0.23	14.	0.	55.	-0.
33121	GTRW08	DISTIL	0.	-0.177	0.	0.098	0.19	-90.	-27.	-1.	-2.	124.	16.	0.30	21.	0.	49.	-1.
33121	GTRW12	DISTIL	0.	-0.166	0.	0.106	0.21	-86.	-24.	-0.	2.	126.	16.	0.31	21.	0.	48.	-0.
33121	GTRW16	DISTIL	0.	-0.148	0.	0.099	0.20	-79.	-18.	-0.	1.	117.	15.	0.29	18.	0.	50.	-0.
33121	GTR308	DISTIL	0.	-0.140	0.	0.067	0.13	-75.	-16.	0.	-9.	97.	12.	0.22	17.	0.	54.	-1.
33121	GTR312	DISTIL	0.	-0.121	0.	0.087	0.17	-68.	-11.	0.	-1.	103.	13.	0.25	17.	0.	52.	-0.
33121	GTR316	DISTIL	0.	-0.119	0.	0.085	0.17	-67.	-10.	0.	-2.	101.	12.	0.25	16.	0.	53.	-0.
33121	FCPADS	DISTIL	0.	-0.289	0.	0.140	0.28	-61.	44.	4.	77.	278.	29.	0.84	19.	0.	56.	-7.
33121	FCPADS	DISTIL	0.	-0.293	0.	0.142	0.28	-62.	44.	4.	78.	282.	29.	0.85	19.	1.	56.	-7.
33121	FCMCDS	DISTIL	0.	-0.194	0.	0.150	0.30	-192.	44.	-0.	-81.	232.	20.	0.37	15.	0.	55.	-4.
33251	STM141	RESIDU	0.	-0.080	0.	0.132	0.06	-28.	41.	-4.	37.	143.	-9.	0.08	45.	0.	55.	3.
33251	STM141	COAL-F	0.	-0.080	0.	0.132	0.06	-28.	48.	-4.	40.	68.	9.	0.05	15.	0.	46.	4.
33251	STM141	COAL-A	0.	-0.080	0.	0.132	0.06	68.	-48.	-4.	136.	68.	9.	0.10	35.	0.	44.	7.
33251	STM088	RESIDU	0.	-0.044	0.	0.072	0.03	-15.	55.	-2.	19.	106.	-12.	0.05	38.	0.	57.	1.
33251	STM088	COAL-F	0.	-0.044	0.	0.072	0.03	-15.	26.	-2.	22.	37.	5.	0.03	8.	0.	48.	2.
33251	STM088	COAL-A	0.	-0.044	0.	0.072	0.03	72.	-26.	-2.	110.	37.	5.	0.07	26.	0.	45.	5.
33251	PFBSTM	COAL-P	0.	-0.180	0.	0.265	0.11	87.	-108.	10.	230.	136.	36.	0.18	41.	0.	42.	9.
33251	TISTMT	RESIDU	0.	-0.125	0.	0.196	0.08	-44.	23.	-6.	56.	184.	-7.	0.10	-24.	0.	63.	-6.
33251	TISTMT	COAL	0.	-0.246	0.	0.387	0.16	-86.	-148.	-12.	118.	199.	25.	0.15	-87.	0.	56.	-4.
33251	TIHRSG	RESIDU	0.	-0.139	0.	0.082	0.03	-49.	17.	-7.	19.	123.	-14.	0.06	-34.	0.	66.	-10.
33251	TIHRSG	COAL	0.	-0.274	0.	0.162	0.07	-96.	-165.	-14.	44.	74.	12.	0.06	-109.	0.	61.	-11.
33251	STIRL	DISTIL	0.	-0.257	0.	0.191	0.08	-16.	44.	8.	129.	289.	34.	0.20	37.	0.	62.	-5.
33251	STIRL	RESIDU	0.	-0.257	0.	0.191	0.08	-90.	-30.	-20.	49.	196.	-18.	0.10	37.	0.	55.	0.
33251	STIRL	COAL	0.	-0.508	0.	0.377	0.16	-178.	-305.	-25.	107.	179.	27.	0.14	-15.	0.	47.	6.
33251	HEGT60	COAL-A	0.	-1.884	0.	0.117	0.05	-274.	-1130.	-94.	369.	-36.	24.	0.16	-2.	0.	49.	-1.
33251	HEGT60	COAL-A	0.	-2.304	0.	0.143	0.05	-357.	-1382.	-115.	430.	-44.	30.	0.16	-49.	42.	54.	-13.
33251	HEGT00	COAL-A	0.	-0.579	0.	0.135	0.06	-44.	-347.	-29.	186.	43.	13.	0.11	-1.	0.	48.	2.
33251	FCMCCL	COAL	0.	-0.932	0.	0.299	0.13	127.	218.	15.	523.	891.	88.	0.68	31.	0.	44.	7.
33251	FCSTCL	COAL	0.	-1.065	0.	0.505	0.21	127.	218.	15.	632.	1077.	108.	0.82	50.	0.	39.	13.
33251	IGGTST	COAL	0.	-0.966	0.	0.076	0.03	-338.	-579.	12.	-3.	-10.	73.	0.03	28.	0.	44.	5.
33251	GTSOAR	RESIDU	-0.779	0.364	-0.779	1.070	0.12	-18.	-75.	12.	209.	311.	54.	0.26	77.	0.	49.	5.
33251	GTAC08	RESIDU	0.	-0.236	0.	0.270	0.11	-144.	-21.	-13.	15.	237.	-12.	0.11	64.	0.	51.	6.
33251	GTAC12	RESIDU	0.	-0.305	0.	0.333	0.14	-185.	-22.	-24.	15.	280.	-13.	0.13	73.	0.	51.	7.
33251	GTAC	RESIDU	0.	-0.366	0.	0.371	0.16	-222.	-28.	-28.	10.	308.	-14.	0.14	79.	0.	51.	8.
33251	GTWL	RESIDU	0.	-0.400	0.	0.352	0.15	-242.	-31.	-31.	-6.	301.	-17.	0.13	84.	0.	47.	8.

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GENERAL ELECTRIC COMPANY
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ALTERNATIVES STUDY

PAGE 63

FUEL UNITS =

EMISSION UNITS =

COST

=\$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING S*****				*****EMISSIONS SAVING S*****				*****TOTAL*****				CAPITL--ELECTRIC POWER---			
		ECS ****DIRECT****		TOTAL----		FESR -----		DIRECT-----		*****TOTAL*****		*****TOTAL*****		EMSR SAVING	TOTAL	COST	LAEC
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		SAVING	EXPORT	SAVED	
															MWH		
33251	CC1626	RESIDU	0.	-1.452	0.	0.548	0.23	-962.	-508.	-121.	-332.	531.	-75.	0.06	191.	0.	29.
33251	CC1626	RESIDU	0.	-0.559	0.	0.458	0.19	-338.	-151.	-43.	-18.	378.	-20.	0.15	106.	0.	42.
33251	CC1622	RESIDU	0.	-0.479	0.	0.431	0.18	-290.	-119.	-37.	-3.	354.	-17.	0.15	93.	0.	44.
33251	CC1222	RESIDU	0.	-0.471	0.	0.431	0.18	-285.	-116.	-36.	-1.	353.	-16.	0.15	95.	0.	44.
33251	CC0822	RESIDU	0.	-0.342	0.	0.361	0.15	-207.	-64.	-26.	13.	299.	-13.	0.13	82.	0.	47.
33251	DEADV3	RESIDU	0.	-1.380	0.	0.621	0.26	-1305.	-479.	-105.	-675.	563.	-57.	0.08	79.	0.	42.
33251	DEADV3	RESIDU	0.	-1.453	0.	0.654	0.26	-1386.	-509.	-111.	-722.	589.	-59.	0.08	82.	10.	42.
33251	DEHTPM	RESIDU	0.	-0.358	0.	0.301	0.13	-346.	-70.	-28.	-139.	268.	-17.	0.05	30.	0.	54.
33251	DES0A3	DISTIL	-1.853	0.364	-1.853	2.364	0.22	-2578.	-83.	18.	-1949.	956.	63.	-0.42	33.	0.	56.
33251	DES0A3	DISTIL	-2.271	0.364	-2.271	2.926	0.22	-3523.	-151.	18.	-2715.	1183.	79.	-0.53	37.	53.	56.
33251	DES0A3	RESIDU	-1.853	0.364	-1.853	2.364	0.22	-5665.	-479.	3.	-5021.	615.	122.	-1.93	33.	0.	50.
33251	DES0A3	RESIDU	-2.271	0.364	-2.271	2.926	0.22	-7673.	-637.	0.	-6849.	765.	152.	-2.16	37.	53.	50.
33251	GTS0AD	DISTIL	-0.681	0.364	-0.681	0.985	0.13	53.	108.	18.	248.	427.	28.	0.32	75.	0.	55.
33251	GTRA08	DISTIL	0.	-1.429	0.	0.571	0.24	-574.	-286.	-12.	70.	808.	106.	0.44	169.	0.	37.
33251	GTRA08	DISTIL	0.	-0.678	0.	0.485	0.20	-229.	-75.	0.	145.	561.	69.	0.35	104.	0.	48.
33251	GTRA12	DISTIL	0.	-1.424	0.	0.576	0.24	-578.	-285.	-12.	66.	809.	106.	0.44	169.	0.	37.
33251	GTRA12	DISTIL	0.	-0.623	0.	0.481	0.20	-207.	-59.	1.	148.	545.	67.	0.34	100.	0.	48.
33251	GTRA16	DISTIL	0.	-0.562	0.	0.448	0.19	-183.	-42.	2.	142.	510.	62.	0.32	90.	0.	50.
33251	GTR208	DISTIL	0.	-0.448	0.	0.364	0.15	-137.	-10.	4.	124.	434.	52.	0.28	86.	0.	53.
33251	GTR212	DISTIL	0.	-0.481	0.	0.391	0.17	-150.	-19.	4.	130.	457.	55.	0.29	89.	0.	52.
33251	GTR216	DISTIL	0.	-0.487	0.	0.409	0.17	-153.	-21.	4.	136.	469.	57.	0.30	89.	0.	51.
33251	GTRW08	DISTIL	0.	-1.459	0.	0.541	0.23	-570.	-295.	-13.	73.	799.	106.	0.44	183.	0.	36.
33251	GTRW08	DISTIL	0.	-0.881	0.	0.485	0.21	-310.	-132.	-3.	129.	615.	78.	0.37	126.	0.	45.
33251	GTRW12	DISTIL	0.	-1.394	0.	0.606	0.26	-545.	-277.	-12.	98.	817.	107.	0.46	183.	0.	35.
33251	GTRW12	DISTIL	0.	-0.827	0.	0.528	0.22	-289.	-117.	-2.	147.	624.	78.	0.38	125.	0.	44.
33251	GTRW16	DISTIL	0.	-1.429	0.	0.571	0.24	-568.	-286.	-12.	75.	808.	106.	0.45	180.	0.	36.
33251	GTRW16	DISTIL	0.	-0.736	0.	0.491	0.21	-252.	-91.	-0.	143.	580.	72.	0.36	120.	0.	45.
33251	GTR308	DISTIL	0.	-1.701	0.	0.300	0.13	-697.	-363.	-17.	-54.	731.	102.	0.35	188.	0.	40.
33251	GTR308	DISTIL	0.	-0.694	0.	0.331	0.14	-235.	-79.	0.	94.	461.	61.	0.29	105.	0.	51.
33251	GTR312	DISTIL	0.	-1.507	0.	0.493	0.21	-619.	-308.	-14.	25.	786.	105.	0.41	189.	0.	36.
33251	GTR312	DISTIL	0.	-0.601	0.	0.431	0.18	-198.	-53.	2.	134.	511.	63.	0.32	107.	0.	48.
33251	GTR316	DISTIL	0.	-1.524	0.	0.476	0.20	-628.	-313.	-14.	16.	781.	105.	0.41	187.	0.	37.
33251	GTR316	DISTIL	0.	-0.593	0.	0.421	0.18	-195.	-51.	2.	131.	504.	62.	0.31	103.	0.	49.
33251	FCPADS	DISTIL	0.	-1.348	0.	0.653	0.28	-220.	111.	12.	424.	1205.	130.	0.79	99.	0.	55.
33251	FCPADS	DISTIL	0.	-1.457	0.	0.706	0.28	-240.	119.	12.	456.	1301.	140.	0.80	106.	15.	55.
33251	FCMCDS	DISTIL	0.	-1.189	0.	0.811	0.34	-892.	134.	-6.	-248.	1228.	113.	0.49	89.	0.	52.
33251	FCMCDS	DISTIL	0.	-0.964	0.	0.746	0.32	-689.	117.	-2.	-139.	1053.	99.	0.46	79.	0.	53.
33254	STM141	RESIDU	0.	-0.008	0.	0.013	0.04	-18.	11.	-0.	-12.	20.	-2.	0.02	4.	0.	58.
33254	STM141	COAL-F	0.	-0.008	0.	0.013	0.04	-18.	-5.	-0.	-11.	7.	1.	-0.01	-1.	0.	49.
33254	STM141	COAL-A	0.	-0.008	0.	0.013	0.04	-1.	-5.	-0.	6.	7.	1.	0.04	1.	0.	47.
33254	STM088	RESIDU	0.	-0.004	0.	0.007	0.02	-17.	13.	-0.	-14.	17.	-3.	0.00	4.	0.	59.
33254	STM088	COAL-F	0.	-0.004	0.	0.007	0.02	-17.	-3.	-0.	-13.	4.	0.	-0.03	-1.	0.	50.
33254	STM088	COAL-A	0.	-0.004	0.	0.007	0.02	-1.	-3.	-0.	3.	4.	0.	0.02	1.	0.	48.
33254	PFBSTM	COAL-P	0.	-0.018	0.	0.026	0.07	3.	-11.	2.	17.	13.	5.	0.11	-1.	0.	49.
33254	TISTMT	RESIDU	0.	-0.025	0.	0.038	0.11	-24.	5.	-1.	-4.	36.	-1.	0.09	-15.	0.	72.
33254	TISTMT	COAL	0.	-0.025	0.	0.038	0.11	-24.	-15.	-1.	-4.	20.	3.	0.06	-24.	0.	68.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS***** - - - EMISSIONS SAVINGS - - -												CAPITL--ELECTRIC POWER---				
		ECS ****DIRECT*****		-----TOTAL----		FESR -----		DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
33254	TIHRS0	RESIDU	0.	-0.027	0.	0.016	0.05	-25.	3.	-1.	-12.	24.	-3.	0.03	-17.	0.	76.	-3.
33254	TIHRS0	COAL	0.	-0.027	0.	0.016	0.05	-25.	-16.	-1.	-11.	7.	1.	-0.01	-26.	0.	70.	-3.
33254	STIRL	DISTIL	0.	-0.051	0.	0.038	0.11	-18.	9.	2.	10.	57.	7.	0.23	7.	0.	59.	-1.
33254	STIRL	RESIDU	0.	-0.051	0.	0.038	0.11	-33.	-6.	-6.	-6.	39.	-5.	0.09	7.	0.	52.	0.
33254	STIRL	COAL	0.	-0.051	0.	0.038	0.11	-33.	-30.	-3.	-5.	18.	3.	0.05	-0.	0.	47.	1.
33254	HEGT60	COAL-A	0.	-0.230	0.	0.014	0.04	-45.	-138.	-11.	33.	-4.	3.	0.10	-26.	0.	71.	-3.
33254	HEGT00	COAL-A	0.	-0.058	0.	0.013	0.04	-14.	-35.	-3.	9.	4.	1.	0.05	-11.	0.	58.	-1.
33254	FCMCCL	COAL	0.	-0.058	0.	0.065	0.18	10.	43.	3.	49.	110.	11.	0.53	-9.	0.	53.	-0.
33254	FCSTCL	COAL	0.	-0.071	0.	0.086	0.24	10.	43.	3.	60.	129.	12.	0.63	-9.	0.	52.	0.
33254	IGGTST	COAL	0.	-0.061	0.	0.043	0.12	-37.	-37.	3.	-3.	20.	9.	0.08	-9.	0.	54.	-0.
33254	GTSOAR	RESIDU	-0.153	0.072	-0.153	0.211	0.16	-29.	-15.	2.	16.	61.	11.	0.27	12.	0.	45.	1.
33254	GTAC08	RESIDU	0.	-0.046	0.	0.053	0.15	-61.	-4.	-5.	-30.	47.	-4.	0.04	10.	0.	47.	1.
33254	GTAC12	RESIDU	0.	-0.060	0.	0.066	0.18	-69.	-10.	-6.	-30.	55.	-4.	0.06	12.	0.	44.	1.
33254	GTAC16	RESIDU	0.	-0.072	0.	0.073	0.20	-77.	-14.	-7.	-31.	61.	-5.	0.08	13.	0.	43.	1.
33254	GTWC16	RESIDU	0.	-0.079	0.	0.069	0.19	-81.	-17.	-8.	-34.	59.	-5.	0.06	13.	0.	43.	1.
33254	CC1626	RESIDU	0.	-0.110	0.	0.090	0.25	-99.	-30.	-10.	-36.	74.	-6.	0.10	16.	0.	38.	1.
33254	CC1622	RESIDU	0.	-0.094	0.	0.085	0.24	-90.	-23.	-9.	-34.	70.	-5.	0.10	15.	0.	40.	1.
33254	CC1222	RESIDU	0.	-0.093	0.	0.085	0.24	-89.	-23.	-9.	-33.	69.	-5.	0.10	15.	0.	39.	1.
33254	CC0822	RESIDU	0.	-0.067	0.	0.071	0.20	-74.	-13.	-7.	-30.	59.	-4.	0.08	12.	0.	43.	1.
33254	DEADV3	RESIDU	0.	-0.197	0.	0.089	0.25	-232.	-64.	-16.	-142.	84.	-10.	-0.21	10.	0.	43.	-1.
33254	DEADV3	RESIDU	0.	-0.286	0.	0.129	0.26	-330.	-100.	-24.	-200.	116.	-14.	-0.22	14.	12.	43.	-3.
33254	DEHTPM	RESIDU	0.	-0.070	0.	0.059	0.17	-125.	-14.	-7.	-85.	53.	-5.	-0.12	5.	0.	51.	-0.
33254	DES0A3	DISTIL	-0.284	0.072	-0.284	0.357	0.20	-472.	-3.	4.	-383.	145.	9.	-0.71	3.	0.	57.	-5.
33254	DES0A3	DISTIL	-0.447	0.072	-0.447	0.576	0.22	-840.	-30.	4.	-681.	233.	16.	-0.83	5.	21.	57.	-10.
33254	DES0A3	RESIDU	-0.284	0.072	-0.284	0.357	0.20	-1020.	-64.	1.	-928.	92.	18.	-2.54	3.	0.	51.	-2.
33254	DES0A3	RESIDU	-0.447	0.072	-0.447	0.576	0.22	-1802.	-125.	0.	-1640.	151.	30.	-2.78	5.	21.	51.	-6.
33254	GTSOAR	DISTIL	-0.134	0.072	-0.134	0.194	0.17	-17.	21.	4.	21.	84.	5.	0.34	12.	0.	51.	-0.
33254	GTRA08	DISTIL	0.	-0.134	0.	0.095	0.27	-72.	-15.	0.	1.	110.	14.	0.39	17.	0.	41.	-0.
33254	GTRA12	DISTIL	0.	-0.123	0.	0.095	0.27	-68.	-12.	0.	2.	107.	13.	0.38	16.	0.	42.	-0.
33254	GTRA16	DISTIL	0.	-0.111	0.	0.088	0.25	-63.	-8.	0.	1.	100.	12.	0.35	14.	0.	45.	-0.
33254	GTR208	DISTIL	0.	-0.088	0.	0.072	0.20	-54.	-2.	1.	-3.	85.	10.	0.29	13.	0.	48.	-0.
33254	GTR212	DISTIL	0.	-0.095	0.	0.077	0.22	-57.	-4.	1.	-2.	90.	11.	0.31	14.	0.	47.	-0.
33254	GTR216	DISTIL	0.	-0.096	0.	0.081	0.23	-57.	-4.	1.	-1.	92.	11.	0.32	14.	0.	47.	-0.
33254	GTRW08	DISTIL	0.	-0.174	0.	0.095	0.27	-88.	-26.	-1.	-2.	121.	15.	0.42	20.	0.	38.	-1.
33254	GTRW12	DISTIL	0.	-0.163	0.	0.104	0.29	-84.	-23.	0.	2.	123.	15.	0.44	20.	0.	37.	-0.
33254	GTRW16	DISTIL	0.	-0.145	0.	0.097	0.27	-77.	-18.	0.	1.	114.	14.	0.40	18.	0.	40.	-0.
33254	GTR308	DISTIL	0.	-0.137	0.	0.065	0.18	-74.	-16.	0.	-9.	95.	12.	0.31	16.	0.	46.	-1.
33254	GTR312	DISTIL	0.	-0.118	0.	0.085	0.24	-66.	-10.	0.	-1.	101.	12.	0.35	16.	0.	43.	-0.
33254	GTR316	DISTIL	0.	-0.117	0.	0.083	0.23	-66.	-10.	0.	-1.	99.	12.	0.34	16.	0.	44.	-0.
33254	FCPADS	DISTIL	0.	-0.193	0.	0.093	0.26	-43.	36.	3.	49.	193.	20.	0.82	13.	0.	56.	-5.
33254	FCPADS	DISTIL	0.	-0.287	0.	0.139	0.28	-60.	43.	4.	77.	276.	29.	0.85	19.	13.	56.	-9.
33254	FCMCDS	DISTIL	0.	-0.161	0.	0.125	0.35	-160.	40.	0.	-68.	196.	17.	0.45	12.	0.	51.	-4.
33254	FCMCDS	DISTIL	0.	-0.190	0.	0.147	0.36	-188.	43.	0.	-79.	227.	20.	0.45	14.	5.	51.	-5.
33314	STM141	RESIDU	0.	-0.007	0.	0.011	0.09	-10.	-	0.	-5.	13.	-1.	0.07	3.	0.	4.	0.
33314	STM1	COAL-F	0.	-0.007	0.	0.011	0.09	-10.	-	0.	-4.	6.	1.	0.02	-0.	0.	4.	0.
33314	STM14	COAL-A	0.	-0.007	0.	0.011	0.09	-1.	-4.	0.	5.	6.	1.	0.11	1.	0.	42.	0.

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DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 65

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING \$****- - - EMISSIONS SAVING \$****- - -											CAPITL--ELECTRIC POWER---								
		ECS	*****DIRECT*****			-----TOTAL-----			-----FESR-----			-----DIRECT-----			*****TOTAL*****			EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART									
33314	STM088	RESIDU	0.	-0.005	0.	0.008	0.06	-9.	5.	-0.	-6.	11.	-1.	0.04	3.	0.	48.	0.			
33314	STM088	COAL-F	0.	-0.005	0.	0.008	0.06	-9.	-3.	-0.	-5.	4.	0.	-0.01	-0.	0.	46.	0.			
33314	STM088	COAL-A	0.	-0.005	0.	0.008	0.06	-1.	-3.	-0.	3.	4.	0.	0.07	1.	0.	43.	0.			
33314	PFBSTM	COAL-P	0.	-0.012	0.	0.018	0.15	1.	-7.	1.	11.	9.	3.	0.22	-1.	0.	46.	0.			
33314	TISTMT	RESIDU	0.	-0.015	0.	0.025	0.21	-13.	1.	-1.	-1.	21.	-0.	0.19	-9.	0.	76.	-1.			
33314	TISTMT	COAL	0.	-0.015	0.	0.025	0.21	-13.	-9.	-1.	-0.	13.	2.	0.13	-14.	0.	82.	-1.			
33314	TIHRS9	RESIDU	0.	-0.011	0.	0.009	0.08	-12.	3.	-1.	-5.	13.	-1.	0.06	-9.	0.	81.	-1.			
33314	TIHRS9	COAL	0.	-0.011	0.	0.009	0.08	-12.	-7.	-1.	-5.	5.	1.	0.00	-13.	0.	84.	-2.			
33314	STIRL	DISTIL	0.	-0.028	0.	0.022	0.19	-10.	4.	1.	6.	31.	4.	0.39	5.	0.	41.	-0.			
33314	STIRL	RESIDU	0.	-0.028	0.	0.022	0.19	-18.	-4.	-3.	-2.	22.	-3.	0.16	5.	0.	35.	0.			
33314	STIRL	COAL	0.	-0.028	0.	0.022	0.19	-18.	-17.	-1.	-1.	11.	2.	0.11	1.	0.	37.	1.			
33314	HEGT85	COAL-A	0.	-0.070	0.	0.012	0.10	-13.	-42.	-4.	13.	3.	1.	0.17	-17.	0.	97.	-2.			
33314	HEGT85	COAL-A	0.	-0.215	0.	0.037	0.13	-41.	-129.	-11.	40.	9.	4.	0.20	-27.	16.	70.	-5.			
33314	HEGT60	COAL-A	0.	-0.066	0.	0.016	0.13	-14.	-40.	-3.	13.	5.	2.	0.18	-13.	0.	84.	-1.			
33314	HEGT60	COAL-A	0.	-0.068	0.	0.016	0.13	-14.	-41.	-3.	13.	5.	2.	0.19	-13.	0.	81.	-1.			
33314	HEGT00	COAL-A	0.	-0.026	0.	0.008	0.07	-6.	-16.	-1.	5.	3.	1.	0.08	-6.	0.	63.	-1.			
33314	FCMCCL	COAL	0.	-0.029	0.	0.033	0.28	5.	21.	2.	24.	55.	5.	0.81	-6.	0.	58.	-0.			
33314	FCSTCL	COAL	0.	-0.037	0.	0.045	0.38	4.	20.	1.	30.	65.	6.	0.97	-7.	0.	60.	-0.			
33314	FCSTCL	COAL	0.	-0.040	0.	0.049	0.39	5.	21.	2.	34.	70.	7.	1.00	-7.	1.	55.	-0.			
33314	IGGTST	COAL	0.	-0.035	0.	0.027	0.23	-20.	-21.	1.	-0.	13.	5.	0.17	-6.	0.	60.	-0.			
33314	GTSOAR	RESIDU	-0.072	0.036	-0.072	0.101	0.25	-13.	-6.	1.	8.	30.	5.	0.41	5.	0.	31.	0.			
33314	GTAC08	RESIDU	0.	-0.023	0.	0.027	0.23	-31.	-2.	-3.	-15.	23.	-2.	0.06	5.	0.	32.	1.			
33314	GTAC12	RESIDU	0.	-0.030	0.	0.033	0.28	-35.	-5.	-3.	-15.	28.	-2.	0.10	6.	0.	27.	1.			
33314	GTAC16	RESIDU	0.	-0.035	0.	0.037	0.31	-37.	-7.	-4.	-15.	30.	-2.	0.12	6.	0.	25.	1.			
33314	GTWC16	RESIDU	0.	-0.039	0.	0.035	0.29	-40.	-9.	-4.	-17.	30.	-3.	0.10	6.	0.	26.	1.			
33314	CC1626	RESIDU	0.	-0.044	0.	0.038	0.32	-41.	-11.	-4.	-15.	32.	-2.	0.14	5.	0.	28.	0.			
33314	CC1626	RESIDU	0.	-0.061	0.	0.052	0.35	-53.	-17.	-6.	-18.	42.	-3.	0.16	8.	3.	27.	0.			
33314	CC1622	RESIDU	0.	-0.042	0.	0.040	0.34	-40.	-10.	-4.	-15.	33.	-2.	0.15	6.	0.	26.	0.			
33314	CC1622	RESIDU	0.	-0.053	0.	0.049	0.36	-48.	-14.	-5.	-16.	39.	-2.	0.17	7.	2.	25.	1.			
33314	CC1222	RESIDU	0.	-0.042	0.	0.040	0.34	-40.	-10.	-4.	-14.	33.	-2.	0.16	6.	0.	25.	1.			
33314	CC1222	RESIDU	0.	-0.052	0.	0.049	0.36	-48.	-14.	-5.	-16.	39.	-2.	0.17	7.	2.	24.	1.			
33314	CC0822	RESIDU	0.	-0.038	0.	0.042	0.35	-40.	-8.	-4.	-14.	33.	-2.	0.16	6.	0.	22.	1.			
33314	STIG15	RESIDU	0.	-0.068	0.	0.014	0.12	-49.	-20.	-2.	-23.	22.	-1.	-0.02	5.	0.	41.	-1.			
33314	STIG15	RESIDU	0.	-2.309	0.	0.483	0.17	-1402.	-916.	-69.	-521.	540.	3.	0.01	180.	254.	38.	-38.			
33314	STIG10	RESIDU	0.	-0.062	0.	0.020	0.17	-48.	-18.	-2.	-22.	24.	-1.	0.02	5.	0.	36.	-0.			
33314	STIG10	RESIDU	0.	-0.194	0.	0.064	0.22	-133.	-70.	-5.	-52.	64.	1.	0.05	17.	17.	35.	-2.			
33314	STIG15	RESIDU	0.	-0.059	0.	0.023	0.20	-48.	-16.	-1.	-22.	26.	-0.	0.03	6.	0.	33.	-0.			
33314	STIG15	RESIDU	0.	-0.109	0.	0.043	0.23	-82.	-36.	-3.	-34.	42.	1.	0.05	11.	7.	32.	-1.			
33314	DEADV3	RESIDU	0.	-0.054	0.	0.028	0.24	-69.	-14.	-5.	-43.	28.	-3.	-0.18	3.	0.	39.	-0.			
33314	DEADV3	RESIDU	0.	-0.112	0.	0.059	0.29	-136.	-38.	-10.	-82.	52.	-5.	-0.19	7.	8.	38.	-1.			
33314	DEHTPM	RESIDU	0.	-0.035	0.	0.038	0.32	-63.	-7.	-4.	-40.	31.	-2.	-0.11	3.	0.	33.	0.			
33314	DESOA3	DISTIL	-0.094	0.036	-0.094	0.118	0.20	-134.	6.	2.	-108.	48.	3.	-0.55	2.	0.	49.	-1.			
33314	DESOA3	DISTIL	-0.177	0.036	-0.177	0.236	0.25	-332.	-7.	2.	-269.	97.	7.	-0.78	3.	11.	51.	-4.			
33314	DESOA3	RESIDU	-0.094	0.036	-0.094	0.118	0.20	-292.	-14.	1.	-266.	31.	6.	-2.19	2.	0.	44.	-1.			
33314	DESOA3	RESIDU	-0.177	0.036	-0.177	0.236	0.25	-714.	-45.	0.	-649.	64.	12.	-2.68	3.	11.	45.	-2.			
33314	GTSOAR	DISTIL	-0.066	0.036	-0.066	0.096	0.26	-8.	11.	2.	11.	42.	3.	0.53	6.	0.	33.	0.			

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FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS***** - - EMISSIONS SAVINGS - -										CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****		-----TOTAL-----		FESR		-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX					PART		
33314	GTRA08	DISTIL	0.	-0.044	0.	0.038	0.32	-26.	-1.	0.	0.	44.	5.	0.47	5.	0.	32.	-0.
33314	GTRA08	DISTIL	0.	-0.055	0.	0.046	0.34	-31.	-4.	0.	1.	51.	6.	0.48	6.	2.	30.	-0.
33314	GTRA12	DISTIL	0.	-0.043	0.	0.039	0.33	-26.	-1.	0.	1.	44.	5.	0.48	5.	0.	32.	-0.
33314	GTRA12	DISTIL	0.	-0.052	0.	0.046	0.35	-30.	-3.	0.	1.	51.	6.	0.49	6.	2.	30.	-0.
33314	GTRA16	DISTIL	0.	-0.043	0.	0.039	0.33	-26.	-1.	0.	0.	44.	5.	0.48	5.	0.	32.	-0.
33314	GTRA16	DISTIL	0.	-0.048	0.	0.043	0.34	-29.	-2.	0.	1.	48.	6.	0.48	6.	1.	30.	-0.
33314	GTR208	DISTIL	0.	-0.040	0.	0.036	0.30	-25.	0.	1.	-1.	42.	5.	0.44	6.	0.	30.	0.
33314	GTR212	DISTIL	0.	-0.043	0.	0.038	0.32	-27.	-1.	0.	-1.	44.	5.	0.46	6.	0.	28.	0.
33314	GTR216	DISTIL	0.	-0.043	0.	0.039	0.33	-26.	-1.	0.	-0.	44.	5.	0.48	5.	0.	29.	-0.
33314	GTR216	DISTIL	0.	-0.043	0.	0.040	0.34	-27.	-1.	0.	0.	45.	5.	0.48	6.	0.	28.	0.
33314	GTRW08	DISTIL	0.	-0.050	0.	0.032	0.27	-28.	-3.	0.	-1.	42.	5.	0.44	5.	0.	36.	-1.
33314	GTRW08	DISTIL	0.	-0.074	0.	0.046	0.30	-39.	-9.	-0.	-0.	56.	7.	0.45	7.	4.	35.	-1.
33314	GTRW12	DISTIL	0.	-0.048	0.	0.034	0.29	-27.	-2.	0.	-0.	43.	5.	0.46	5.	0.	35.	-0.
33314	GTRW12	DISTIL	0.	-0.071	0.	0.051	0.32	-38.	-9.	-0.	1.	58.	7.	0.47	7.	4.	33.	-1.
33314	GTRW16	DISTIL	0.	-0.048	0.	0.035	0.29	-27.	-2.	0.	-0.	43.	5.	0.46	4.	0.	35.	-0.
33314	GTRW16	DISTIL	0.	-0.065	0.	0.048	0.32	-36.	-7.	0.	1.	55.	7.	0.47	7.	3.	34.	-1.
33314	GTR308	DISTIL	0.	-0.053	0.	0.029	0.25	-30.	-3.	0.	-4.	41.	5.	0.41	5.	0.	35.	-1.
33314	GTR308	DISTIL	0.	-0.059	0.	0.033	0.26	-33.	-5.	0.	-4.	45.	6.	0.42	6.	1.	33.	-1.
33314	GTR312	DISTIL	0.	-0.047	0.	0.035	0.30	-27.	-2.	0.	-1.	43.	5.	0.46	5.	0.	32.	-0.
33314	GTR312	DISTIL	0.	-0.056	0.	0.042	0.31	-32.	-4.	0.	-0.	49.	6.	0.46	7.	2.	31.	-0.
33314	GTR316	DISTIL	0.	-0.047	0.	0.035	0.30	-27.	-2.	0.	-1.	43.	5.	0.45	5.	0.	33.	-0.
33314	GTR316	DISTIL	0.	-0.055	0.	0.041	0.31	-32.	-4.	0.	-1.	49.	6.	0.46	6.	1.	32.	-0.
33314	FCPADS	DISTIL	0.	-0.055	0.	0.027	0.23	-14.	15.	1.	13.	60.	6.	0.76	4.	0.	51.	-2.
33314	FCPADS	DISTIL	0.	-0.143	0.	0.069	0.28	-30.	22.	2.	38.	138.	14.	0.85	9.	12.	53.	-5.
33314	FCMCDS	DISTIL	0.	-0.046	0.	0.036	0.30	-48.	16.	1.	-21.	61.	5.	0.44	4.	0.	45.	-1.
33314	FCMCDS	DISTIL	0.	-0.090	0.	0.073	0.36	-94.	21.	-0.	-40.	113.	10.	0.45	7.	8.	47.	-3.
33315	STM141	RESIDU	0.	-0.010	0.	0.016	0.08	-15.	7.	-0.	-7.	19.	-1.	0.06	4.	0.	50.	0.
33315	STM141	COAL-F	0.	-0.010	0.	0.016	0.08	-15.	-6.	-0.	-7.	8.	1.	0.01	-0.	0.	45.	0.
33315	STM141	COAL-A	0.	-0.010	0.	0.016	0.08	-1.	-6.	-0.	7.	8.	1.	0.09	1.	0.	42.	1.
33315	STM088	RESIDU	0.	-0.007	0.	0.011	0.06	-14.	8.	-0.	-9.	16.	-2.	0.03	4.	0.	51.	-0.
33315	STM088	COAL-F	0.	-0.007	0.	0.011	0.06	-14.	-4.	-0.	-8.	6.	1.	-0.01	-0.	0.	46.	0.
33315	STM088	COAL-A	0.	-0.007	0.	0.011	0.06	-1.	-4.	-0.	5.	6.	1.	0.06	1.	0.	43.	0.
33315	PFBSTM	COAL-P	0.	-0.017	0.	0.027	0.13	2.	-10.	2.	16.	14.	4.	0.19	-1.	0.	45.	0.
33315	T1STMT	RESIDU	0.	-0.023	0.	0.037	0.18	-20.	2.	-1.	-1.	32.	-1.	0.17	-12.	0.	71.	-2.
33315	T1STMT	COAL	0.	-0.023	0.	0.037	0.18	-20.	-14.	-1.	-0.	19.	2.	0.11	-18.	0.	72.	-2.
33315	TIHRSG	RESIDU	0.	-0.017	0.	0.014	0.07	-18.	4.	-1.	-8.	19.	-2.	0.05	-12.	0.	76.	-2.
33315	TIHRSG	COAL	0.	-0.017	0.	0.014	0.07	-18.	-10.	-1.	-8.	7.	1.	0.00	-18.	0.	74.	-2.
33315	STIRL	DISTIL	0.	-0.042	0.	0.033	0.16	-15.	5.	1.	9.	47.	6.	0.34	6.	0.	48.	-0.
33315	STIRL	RESIDU	0.	-0.042	0.	0.033	0.16	-26.	-6.	-5.	-3.	32.	-4.	0.14	6.	0.	42.	0.
33315	STIRL	COAL	0.	-0.042	0.	0.033	0.16	-26.	-25.	-2.	-2.	16.	2.	0.09	0.	0.	41.	1.
33315	HEGT85	COAL-A	0.	-0.129	0.	0.021	0.10	-24.	-77.	-6.	24.	5.	2.	0.17	-24.	0.	84.	-3.
33315	HEGT85	COAL-A	0.	-0.333	0.	0.055	0.12	-63.	-200.	-17.	62.	12.	6.	0.20	-33.	22.	65.	-6.
33315	HEGT60	COAL-A	0.	-0.104	0.	0.024	0.12	-21.	-62.	-5.	20.	8.	2.	0.16	-17.	0.	70.	-2.
33315	HEGT00	COAL-A	0.	-0.040	0.	0.012	0.06	-10.	-24.	-2.	7.	4.	1.	0.07	-8.	0.	57.	-1.
33315	FCMCF	COAL	0.	-0.043	0.	0.049	0.24	7.	2.	37.	82.	8.	0.70	-8.	0.	5.	-0.	
33315	FCST.	COAL	0.	-0.060	0.	0.074	0.36	7.	5.	2.	50.	105.	10.	0.91	-8.	0.	50.	0.

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*****FUEL SAVING***** - - - EMISSIONS SAVING S - - -														CAPITL--ELECTRIC POWER---				
PROCS	ECS	ECS	*****DIRECT*****	-----TOTAL-----	FESR	-----DIRECT-----	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC						
		FUEL	OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED					
												MWH						
33315	IGGTST	COAL	0.	-0.052	0.	0.040	0.20	-30.	-31.	2.	-0.	19.	8.	0.15	-7.	0.	53.	-0.
33315	GTSOAR	RESIDU	-0.108	0.054	-0.108	0.151	0.21	-20.	-8.	2.	12.	45.	8.	0.35	7.	0.	36.	1.
33315	GTAC08	RESIDU	0.	-0.035	0.	0.040	0.20	-46.	-3.	-4.	-23.	35.	-3.	0.05	7.	0.	38.	1.
33315	GTAC12	RESIDU	0.	-0.045	0.	0.049	0.24	-52.	-7.	-5.	-22.	41.	-3.	0.09	8.	0.	34.	1.
33315	GTAC16	RESIDU	0.	-0.052	0.	0.055	0.27	-56.	-10.	-5.	-23.	45.	-3.	0.11	8.	0.	32.	1.
33315	GTWC16	RESIDU	0.	-0.059	0.	0.032	0.25	-61.	-13.	-6.	-26.	45.	-4.	0.08	8.	0.	33.	1.
33315	CC1626	RESIDU	0.	-0.081	0.	0.069	0.34	-72.	-22.	-7.	-25.	56.	-4.	0.15	10.	0.	27.	1.
33315	CC1626	RESIDU	0.	-0.091	0.	0.078	0.35	-80.	-26.	-8.	-27.	62.	-4.	0.16	12.	2.	26.	1.
33315	CC1622	RESIDU	0.	-0.078	0.	0.072	0.36	-72.	-20.	-7.	-24.	58.	-4.	0.16	10.	0.	25.	1.
33315	CC1622	RESIDU	0.	-0.079	0.	0.073	0.36	-72.	-21.	-7.	-24.	58.	-4.	0.17	11.	0.	25.	1.
33315	CC1222	RESIDU	0.	-0.077	0.	0.073	0.36	-71.	-20.	-7.	-24.	58.	-4.	0.17	11.	0.	24.	1.
33315	CC1222	RESIDU	0.	-0.077	0.	0.073	0.36	-71.	-20.	-7.	-24.	58.	-4.	0.17	11.	0.	24.	1.
33315	CC0822	RESIDU	0.	-0.057	0.	0.062	0.31	-59.	-12.	-6.	-22.	50.	-3.	0.14	9.	0.	30.	1.
33315	STIG15	RESIDU	0.	-0.124	0.	0.026	0.13	-87.	-39.	-4.	-40.	38.	-2.	-0.02	9.	0.	40.	-1.
33315	STIG15	RESIDU	0.	-3.463	0.	0.724	0.17	-2103.	-1374.	-103.	-782.	810.	4.	0.01	272.	379.	38.	-57.
33315	STIG10	RESIDU	0.	-0.113	0.	0.037	0.18	-85.	-34.	-3.	-38.	43.	-1.	0.02	10.	0.	35.	-0.
33315	STIG10	RESIDU	0.	-0.291	0.	0.096	0.22	-200.	-106.	-8.	-78.	96.	1.	0.05	26.	22.	34.	-3.
33315	STIG15	RESIDU	0.	-0.108	0.	0.042	0.21	-85.	-32.	-3.	-38.	45.	-0.	0.04	10.	0.	33.	0.
33315	STIG15	RESIDU	0.	-0.163	0.	0.064	0.23	-123.	-54.	-4.	-51.	63.	1.	0.05	16.	7.	32.	-1.
33315	DEADV3	RESIDU	0.	-0.098	0.	0.052	0.25	-124.	-29.	-8.	-77.	49.	-6.	-0.18	6.	0.	38.	-0.
33315	DEADV3	RESIDU	0.	-0.169	0.	0.089	0.23	-205.	-57.	-14.	-123.	78.	-8.	-0.19	9.	10.	38.	-1.
33315	DEHTPM	RESIDU	0.	-0.053	0.	0.056	0.27	-94.	-10.	-5.	-60.	46.	-3.	-0.09	5.	0.	37.	1.
33315	DES0A3	DISTIL	-0.160	0.054	-0.160	0.204	0.21	-247.	6.	3.	-199.	84.	5.	-0.61	3.	0.	51.	-2.
33315	DES0A3	DISTIL	-0.267	0.054	-0.267	0.355	0.25	-501.	-11.	3.	-406.	146.	10.	-0.78	4.	14.	51.	-5.
33315	DES0A3	RESIDU	-0.160	0.054	-0.160	0.204	0.21	-535.	-28.	1.	-487.	54.	10.	-2.33	3.	0.	45.	-1.
33315	DES0A3	RESIDU	-0.267	0.054	-0.267	0.355	0.25	-1076.	-68.	1.	-979.	97.	18.	-2.68	4.	14.	46.	-3.
33315	GTSGAD	DISTIL	-0.099	0.054	-0.099	0.144	0.22	-13.	16.	3.	16.	63.	4.	0.45	8.	0.	40.	0.
33315	GTRA06	DISTIL	0.	-0.081	0.	0.069	0.34	-47.	-6.	0.	2.	76.	9.	0.48	10.	0.	31.	-0.
33315	GTRA08	DISTIL	0.	-0.082	0.	0.070	0.34	-47.	-6.	0.	2.	77.	9.	0.48	10.	0.	30.	0.
33315	GTRA12	DISTIL	0.	-0.078	0.	0.069	0.34	-46.	-5.	0.	2.	76.	9.	0.48	10.	0.	31.	0.
33315	GTRA16	DISTIL	0.	-0.072	0.	0.065	0.32	-43.	-3.	1.	1.	72.	9.	0.45	9.	0.	34.	-0.
33315	GTR208	DISTIL	0.	-0.060	0.	0.054	0.26	-38.	0.	1.	-2.	62.	7.	0.38	8.	0.	37.	-0.
33315	GTR212	DISTIL	0.	-0.064	0.	0.057	0.28	-40.	-1.	1.	-1.	66.	8.	0.40	9.	0.	36.	-0.
33315	GTR216	DISTIL	0.	-0.065	0.	0.060	0.29	-40.	-1.	1.	-0.	67.	8.	0.41	8.	0.	35.	0.
33315	GTRW08	DISTIL	0.	-0.092	0.	0.058	0.28	-50.	-9.	0.	-1.	73.	9.	0.45	9.	0.	35.	-1.
33315	GTRW08	DISTIL	0.	-0.111	0.	0.070	0.30	-59.	-14.	-0.	-1.	85.	11.	0.45	12.	3.	34.	-1.
33315	GTRW12	DISTIL	0.	-0.088	0.	0.062	0.30	-48.	-8.	0.	1.	73.	9.	0.46	9.	0.	34.	-0.
33315	GTRW12	DISTIL	0.	-0.107	0.	0.076	0.32	-57.	-13.	-0.	2.	87.	11.	0.47	12.	3.	33.	-1.
33315	GTRW16	DISTIL	0.	-0.087	0.	0.063	0.31	-48.	-7.	0.	0.	75.	9.	0.46	9.	0.	34.	-0.
33315	GTRW16	DISTIL	0.	-0.098	0.	0.071	0.32	-54.	-11.	0.	1.	82.	10.	0.47	11.	2.	33.	-0.
33315	GTR308	DISTIL	0.	-0.069	0.	0.049	0.24	-50.	-8.	0.	-5.	68.	8.	0.39	10.	0.	36.	-1.
33315	GTR312	DISTIL	0.	-0.084	0.	0.063	0.31	-48.	-7.	0.	-0.	74.	9.	0.45	10.	0.	31.	-0.
33315	GTR316	DISTIL	0.	-0.083	0.	0.062	0.30	-48.	-6.	0.	-1.	73.	9.	0.45	10.	0.	33.	-0.
33315	FCPADS	DISTIL	0.	-0.101	0.	0.049	0.24	-24.	24.	2.	24.	106.	11.	0.78	7.	0.	52.	-3.
33315	FCPADS	DISTIL	0.	-0.215	0.	0.104	0.28	-45.	32.	3.	58.	207.	22.	0.85	13.	16.	53.	-7.
33315	FCMCDS	DISTIL	0.	-0.085	0.	0.066	0.32	-86.	26.	1.	-38.	108.	9.	0.44	6.	0.	47.	-2.

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GENERAL ELECTRIC COMPANY

PAGE 68

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---							
		*****DIRECT*****		-----TOTAL-----		FESR -----		-DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED		
		FUEL OIL+GAS	COAL OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	PART						
33315	FCMCDS	DISTIL	0.	-0.142	0.	0.110	0.36	-141.	32.	-0.	-60.	170.	15.	0.45	10.	48.	-4.
33316	STM141	RESIDU	0.	-0.010	0.	0.016	0.09	-15.	7.	-0.	-7.	19.	-1.	0.06	4.	48.	0.
33316	STM141	COAL-F	0.	-0.010	0.	0.016	0.09	-15.	-6.	-0.	-7.	8.	1.	0.02	-0.	45.	0.
33316	STM141	COAL-A	0.	-0.010	0.	0.016	0.09	-1.	-6.	-0.	7.	8.	1.	0.10	1.	41.	1.
33316	STM088	RESIDU	0.	-0.007	0.	0.011	0.06	-14.	8.	-0.	-9.	16.	-2.	0.04	4.	50.	-0.
33316	STM088	COAL-F	0.	-0.007	0.	0.011	0.06	-14.	-4.	-0.	-8.	6.	1.	-0.01	-0.	46.	0.
33316	STM088	COAL-A	0.	-0.007	0.	0.011	0.06	-1.	-4.	-0.	5.	6.	1.	0.07	1.	43.	0.
33316	PFBSTM	COAL-P	0.	-0.017	0.	0.027	0.15	2.	-10.	2.	16.	14.	4.	0.21	-1.	45.	0.
33316	TISTMT	RESIDU	0.	-0.023	0.	0.037	0.20	-20.	2.	-1.	-1.	32.	-1.	0.18	-12.	72.	-2.
33316	TISTMT	COAL	0.	-0.023	0.	0.037	0.20	-20.	-14.	-1.	-0.	19.	2.	0.13	-18.	76.	-2.
33316	TIHRSG	RESIDU	0.	-0.017	0.	0.014	0.08	-18.	4.	-1.	-8.	19.	-2.	0.06	-12.	78.	-2.
33316	TIHRSG	COAL	0.	-0.017	0.	0.014	0.08	-18.	-10.	-1.	-8.	7.	1.	0.00	-18.	78.	-2.
33316	STIRL	DISTIL	0.	-0.042	0.	0.033	0.18	-15.	5.	1.	9.	47.	6.	0.36	6.	44.	-0.
33316	STIRL	RESIDU	0.	-0.042	0.	0.033	0.18	-26.	-6.	-5.	-3.	32.	-4.	0.16	6.	39.	0.
33316	STIRL	COAL	0.	-0.042	0.	0.033	0.18	-26.	-25.	-2.	-2.	16.	2.	0.10	0.	41.	1.
33316	HEGT85	COAL-A	0.	-0.112	0.	0.018	0.10	-21.	-67.	-6.	21.	4.	2.	0.17	-22.	87.	-3.
33316	HEGT85	COAL-A	0.	-0.333	0.	0.055	0.12	-63.	-200.	-17.	62.	12.	6.	0.20	-33.	65.	-7.
33316	HEGT60	COAL-A	0.	-0.104	0.	0.024	0.13	-21.	-62.	-5.	20.	8.	2.	0.18	-17.	74.	-2.
33316	HEGT00	COAL-A	0.	-0.040	0.	0.012	0.06	-10.	-24.	-2.	7.	4.	1.	0.07	-8.	59.	-1.
33316	FCMCCL	COAL	0.	-0.043	0.	0.049	0.27	7.	32.	2.	37.	82.	8.	0.78	-8.	54.	-0.
33316	FCSTCL	COAL	0.	-0.058	0.	0.072	0.39	7.	31.	2.	49.	102.	10.	0.99	-8.	53.	0.
33316	FCSTCL	COAL	0.	-0.060	0.	0.074	0.39	7.	32.	2.	50.	105.	10.	1.00	-8.	51.	0.
33316	IGGTST	COAL	0.	-0.052	0.	0.040	0.22	-30.	-31.	2.	-0.	19.	8.	0.16	-7.	54.	-0.
33316	GTSGAR	RESIDU	-0.108	0.054	-0.108	0.151	0.24	-20.	-8.	2.	12.	45.	8.	0.40	7.	33.	1.
33316	GTAC08	RESIDU	0.	-0.035	0.	0.040	0.22	-46.	-3.	-4.	-23.	35.	-3.	0.06	7.	34.	1.
33316	GTAC12	RESIDU	0.	-0.045	0.	0.049	0.27	-52.	-7.	-5.	-22.	41.	-3.	0.10	8.	30.	1.
33316	GTAC16	RESIDU	0.	-0.052	0.	0.055	0.30	-56.	-10.	-5.	-23.	45.	-3.	0.12	8.	28.	1.
33316	GTWC16	RESIDU	0.	-0.059	0.	0.052	0.28	-61.	-13.	-6.	-26.	45.	-4.	0.09	8.	28.	1.
33316	CC1626	RESIDU	0.	-0.070	0.	0.060	0.32	-64.	-17.	-6.	-23.	50.	-4.	0.14	9.	28.	1.
33316	CC1626	RESIDU	0.	-0.091	0.	0.078	0.35	-80.	-26.	-8.	-27.	62.	-4.	0.16	12.	26.	1.
33316	CC1622	RESIDU	0.	-0.067	0.	0.063	0.34	-63.	-16.	-6.	-23.	51.	-4.	0.15	9.	26.	1.
33316	CC1622	RESIDU	0.	-0.079	0.	0.073	0.36	-72.	-21.	-7.	-24.	58.	-4.	0.17	11.	25.	1.
33316	CC1222	RESIDU	0.	-0.067	0.	0.063	0.34	-63.	-16.	-6.	-22.	52.	-3.	0.16	9.	25.	1.
33316	CC1222	RESIDU	0.	-0.077	0.	0.073	0.36	-71.	-20.	-7.	-24.	58.	-4.	0.17	11.	24.	1.
33316	CC0822	RESIDU	0.	-0.057	0.	0.062	0.34	-59.	-12.	-6.	-22.	50.	-3.	0.15	9.	25.	1.
33316	STIG15	RESIDU	0.	-0.108	0.	0.022	0.12	-76.	-32.	-3.	-36.	34.	-2.	-0.02	8.	40.	-1.
33316	STIG15	RESIDU	0.	-3.463	0.	0.724	0.17	-2103.	-1374.	-103.	-782.	810.	4.	0.01	272.	381.	-57.
33316	STIG10	RESIDU	0.	-0.098	0.	0.032	0.18	-75.	-28.	-3.	-34.	38.	-1.	0.02	9.	35.	-0.
33316	STIG10	RESIDU	0.	-0.291	0.	0.096	0.22	-200.	-106.	-8.	-78.	96.	1.	0.05	26.	34.	-3.
33316	STIG15	RESIDU	0.	-0.093	0.	0.037	0.20	-75.	-27.	-2.	-35.	40.	-0.	0.03	9.	33.	-0.
33316	STIG15	RESIDU	0.	-0.163	0.	0.064	0.23	-123.	-54.	-4.	-51.	63.	1.	0.05	16.	32.	-1.
33316	DEADV3	RESIDU	0.	-0.085	0.	0.045	0.24	-109.	-23.	-7.	-68.	44.	-5.	-0.18	5.	38.	-0.
33316	DEADV3	RESIDU	0.	-0.169	0.	0.089	0.29	-205.	-57.	-14.	-123.	78.	-8.	-0.19	9.	38.	-2.
33316	DEHTPM	RESIDU	0.	-0.053	0.	0.056	0.31	-94.	-10.	-5.	-60.	46.	-3.	-0.10	5.	34.	1.
33316	DES0A3	DISTIL	-0.146	0.054	-0.146	0.184	0.21	-212.	9.	3.	-172.	75.	5.	-0.56	3.	50.	-2.
33316	DES0A3	STIL	-0.267	0.054	-0.267	0.355	0.25	-501.	-11.	3.	-406.	146.	10.	-0.78	4.	51.	-6.

DATE 06/12/79

ISE PEO AES

GENERAL ELECTRIC COMPANY

COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 69

FUEL UNITS =

EMISSION UNITS=

COST = \$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

*****FUEL SAVING S*****		*****EMISSIONS SAVING S*****		CAPITL--ELECTRIC POWER---	
PROCS	ECS	ECS *****DIRECT*****	TOTAL-----FESR -----DIRECT-----	*****TOTAL*****	EMSR SAVING TOTAL COST LASC
		FUEL OIL+GAS COAL OIL+GAS COAL	NOX SOX PART NOX SOX PART		EXPORT MWH SAVED
33316	DESOA3 RESIDU	-0.146 0.054 -0.146	0.184 0.21 -463. -23.	2. -421. 48.	9. -2.23 3. 0. 45. -1.
33316	DESOA3 RESIDU	-0.267 0.054 -0.267	0.355 0.25 -1076. -68.	1. -979. 97.	18. -2.68 4. 16. 45. -3.
33316	GTSOAD DISTIL	-0.099 0.054 -0.099	0.144 0.25 -13. 16.	3. 16. 63.	4. 0.51 8. 0. 36. 0.
33316	GTRA08 DISTIL	0. -0.070 0.	0.060 0.32 -41. -3.	1. 1. 68.	8. 0.48 8. 0. 32. -0.
33316	GTRA08 DISTIL	0. -0.082 0.	0.070 0.34 -47. -6.	0. 2. 77.	9. 0.48 10. 2. 30. -0.
33316	GTRA12 DISTIL	0. -0.069 0.	0.061 0.33 -41. -2.	1. 1. 69.	8. 0.48 8. 0. 31. -0.
33316	GTRA12 DISTIL	0. -0.078 0.	0.069 0.34 -46. -5.	0. 2. 76.	9. 0.49 10. 2. 30. -0.
33316	GTRA16 DISTIL	0. -0.068 0.	0.062 0.34 -41. -2.	1. 1. 69.	8. 0.48 8. 0. 31. -0.
33316	GTRA16 DISTIL	0. -0.072 0.	0.065 0.34 -43. -3.	1. 1. 72.	9. 0.48 9. 1. 30. -0.
33316	GTR208 DISTIL	0. -0.060 0.	0.054 0.29 -38. 0.	1. -2. 62.	7. 0.42 8. 0. 32. -0.
33316	GTR212 DISTIL	0. -0.064 0.	0.057 0.31 -40. -1.	1. -1. 66.	8. 0.45 9. 0. 31. -0.
33316	GTR216 DISTIL	0. -0.065 0.	0.060 0.33 -40. -1.	1. -0. 67.	8. 0.46 8. 0. 30. 0.
33316	GTRW08 DISTIL	0. -0.080 0.	0.050 0.27 -44. -5.	0. -2. 66.	8. 0.44 8. 0. 36. -1.
33316	GTRW08 DISTIL	0. -0.111 0.	0.070 0.30 -59. -14.	0. -1. 85.	11. 0.45 12. 5. 34. -1.
33316	GTRW12 DISTIL	0. -0.076 0.	0.054 0.29 -42. -4.	0. -0. 67.	8. 0.45 8. 0. 34. -1.
33316	GTRW12 DISTIL	0. -0.107 0.	0.076 0.32 -57. -13.	0. 2. 87.	11. 0.47 12. 5. 33. -1.
33316	GTRW16 DISTIL	0. -0.075 0.	0.055 0.30 -42. -4.	0. -0. 67.	8. 0.46 8. 0. 35. -1.
33316	GTRW16 DISTIL	0. -0.098 0.	0.071 0.32 -54. -11.	0. 1. 82.	10. 0.47 11. 4. 33. -1.
33316	GTR308 DISTIL	0. -0.084 0.	0.046 0.25 -47. -6.	0. -5. 65.	8. 0.41 9. 0. 34. -1.
33316	GTR308 DISTIL	0. -0.089 0.	0.049 0.26 -50. -8.	0. -5. 68.	8. 0.42 10. 1. 33. -1.
33316	GTR312 DISTIL	0. -0.074 0.	0.056 0.30 -43. -4.	1. -1. 67.	8. 0.46 9. 0. 32. -0.
33316	GTR312 DISTIL	0. -0.084 0.	0.063 0.31 -48. -7.	0. -0. 74.	9. 0.46 10. 2. 31. -0.
33316	GTR316 DISTIL	0. -0.075 0.	0.055 0.30 -43. -4.	1. -1. 67.	8. 0.46 8. 0. 33. -0.
33316	GTR316 DISTIL	0. -0.083 0.	0.062 0.31 -48. -6.	0. -1. 73.	9. 0.46 10. 1. 31. -0.
33316	FCPADS DISTIL	0. -0.088 0.	0.042 0.23 -21. 23.	2. 20. 94.	10. 0.77 6. 0. 52. -3.
33316	FCPADS DISTIL	0. -0.215 0.	0.104 0.28 -45. 32.	3. 58. 207.	22. 0.85 13. 18. 53. -3.
33316	FCMCDS DISTIL	0. -0.073 0.	0.057 0.31 -75. 25.	1. -33. 96.	8. 0.44 6. 0. 47. -2.
33316	FCMCDS DISTIL	0. -0.142 0.	0.110 0.36 -141. 32.	0. -60. 170.	15. 0.45 10. 12. 48. -4.
33	FCMCDS DISTIL	-16.228-69.227-16.228	58.776 1.27-70798. -17632. -1693. -29955. 51017.	4078. 0.13 6524. 1676. 17246. -581.	
ALL	FCMCDS DISTIL	*****840.510	14.96*****-20251. -43330.849019. 53964. 0.33108182. 123090. 130893. -22305.		

COAL-FIRED NOCOGENERATION PROCESS BOILER

6.1 - FUEL & EMISSIONS SAVINGS - NATIONALLY

ISE PEO AES

COGENERATION TECHNOLOGY

PAGE 1

ALTERNATIVES STUDY

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1	FUEL AND EMISSIONS SAVINGS
TIME 1990	LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING*****EMISSIONS SAVING*****												CAPITL--ELECTRIC POWER---				
		ECS ****DIRECT*****		TOTAL-----FESR		DIRECT-----		*****TOTAL*****		ENSR	SAVING	TOTAL EXPORT	COST LAEC SAVED					
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART					NOX	SOX	PART		
20	STM141	COAL-A	0.	-0.107	0.	0.177	0.43	39.	-88.	-5.	131.	71.	16.	0.41	-778.	9.	-1091.	-497.
22	STM141	COAL-A	0.	-0.004	0.	0.007	0.14	4.	-3.	-0.	8.	4.	0.	0.38	147.	0.	43.	26.
24	STM141	COAL-A	0.	-0.018	0.	0.250	0.82	-2.	-11.	-1.	84.	136.	15.	0.79	-2332.	2.	-665.	-265.
26	STM141	COAL-A	0.	-0.043	0.	0.071	0.13	26.	-26.	-2.	63.	37.	5.	0.39	1144.	1.	437.	304.
28	STM141	COAL-A	0.	-0.182	0.	0.302	0.51	214.	-115.	-9.	370.	150.	21.	0.32	4711.	16.	1841.	1091.
29	STM141	COAL-A	0.	-0.025	0.	0.041	0.10	30.	-15.	-1.	52.	21.	3.	0.35	671.	1.	253.	176.
33	STM141	COAL-A	0.	-0.006	0.	0.010	0.01	4.	-3.	-0.	9.	5.	1.	0.09	223.	0.	33.	47.
ALL	STM141	COAL-A	0.	-0.454	0.	1.010	0.19	370.	-307.	-23.	842.	498.	71.	0.34	4453.	36.	1006.	1037.
20	STM141	COAL-F	0.	-0.107	0.	0.177	0.43	-57.	-88.	-5.	35.	71.	16.	0.25	-2957.	9.	-1742.	-926.
22	STM141	COAL-F	0.	-0.004	0.	0.007	0.14	-2.	-3.	-0.	2.	4.	0.	0.21	73.	0.	25.	15.
24	STM141	COAL-F	0.	-0.018	0.	0.250	0.82	-7.	-11.	-1.	79.	136.	15.	0.77	-4768.	2.	-1366.	-718.
26	STM141	COAL-F	0.	-0.043	0.	0.071	0.13	-15.	-26.	-2.	22.	37.	5.	0.23	630.	1.	320.	239.
28	STM141	COAL-F	0.	-0.182	0.	0.302	0.51	-75.	-115.	-9.	81.	150.	21.	0.16	2186.	16.	1259.	766.
29	STM141	COAL-F	0.	-0.025	0.	0.041	0.10	-9.	-15.	-1.	13.	21.	3.	0.17	365.	1.	190.	139.
33	STM141	COAL-F	0.	-0.006	0.	0.010	0.01	-4.	-3.	-0.	1.	5.	1.	0.04	78.	0.	-1.	28.
ALL	STM141	COAL-F	0.	-0.454	0.	1.010	0.19	-193.	-307.	-23.	274.	498.	71.	0.18	-5170.	36.	-1547.	-536.
20	STM141	RESIDU	0.	-0.107	0.	0.177	0.43	-57.	1.	-5.	32.	147.	-2.	0.34	3899.	9.	59.	-343.
22	STM141	RESIDU	0.	-0.004	0.	0.007	0.14	-2.	2.	-0.	2.	8.	-1.	0.30	225.	0.	60.	2.
24	STM141	RESIDU	0.	-0.018	0.	0.250	0.82	-7.	-7.	-1.	79.	139.	14.	0.78	2703.	2.	673.	613.
26	STM141	RESIDU	0.	-0.043	0.	0.071	0.13	-15.	12.	-2.	20.	69.	-3.	0.32	1538.	1.	487.	101.
28	STM141	RESIDU	0.	-0.182	0.	0.302	0.51	-75.	154.	-9.	71.	379.	-33.	0.25	7331.	16.	1775.	-401.
29	STM141	RESIDU	0.	-0.025	0.	0.041	0.10	-9.	21.	-1.	11.	52.	-5.	0.27	924.	1.	307.	-43.
33	STM141	RESIDU	0.	-0.006	0.	0.010	0.01	-4.	4.	-0.	1.	11.	-1.	0.07	322.	0.	-138.	14.
ALL	STM141	RESIDU	0.	-0.454	0.	1.010	0.19	-198.	221.	-23.	254.	947.	-35.	0.27	19992.	36.	3793.	-66.
20	STM088	COAL-A	0.	-0.093	0.	0.155	0.38	45.	-81.	-5.	126.	58.	15.	0.38	-1135.	6.	-1187.	-469.
22	STM088	COAL-A	0.	-0.004	0.	0.006	0.11	4.	-2.	-0.	8.	3.	0.	0.35	136.	0.	38.	26.
24	STM088	COAL-A	0.	-0.005	0.	0.184	0.61	-1.	-3.	-0.	60.	101.	11.	0.58	-2989.	0.	-934.	-427.
26	STM088	COAL-A	0.	-0.032	0.	0.054	0.10	28.	-19.	-2.	56.	28.	3.	0.33	950.	0.	352.	252.
28	STM088	COAL-A	0.	-0.086	0.	0.142	0.24	148.	-55.	-4.	221.	70.	10.	0.28	2409.	6.	932.	568.
29	STM088	COAL-A	0.	-0.017	0.	0.029	0.07	33.	-10.	-1.	48.	15.	2.	0.30	568.	0.	205.	144.
33	STM088	COAL-A	0.	-0.004	0.	0.006	0.00	5.	-2.	-0.	8.	3.	0.	0.06	191.	0.	13.	36.
ALL	STM088	COAL-A	0.	-0.262	0.	0.626	0.12	286.	-189.	-13.	573.	301.	46.	0.30	121.	13.	-631.	141.
20	STM088	COAL-F	0.	-0.093	0.	0.155	0.38	-55.	-81.	-5.	26.	58.	15.	0.21	-2994.	6.	-1760.	-854.

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GENERAL ELECTRIC COMPANY
COGENERATION TECHNOLOGY ALTERNATIVES STUDY

PAGE 2

FUEL UNITS =
EMISSION UNITS:
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL (SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****			-----EMISSIONS SAVING S-----			CAPITL--ELECTRIC POWER---			EMSR	SAVING	TOTAL EXPORT MWH	COST LAEC SAVED				
		ECS	*****DIRECT*****	-----TOTAL-----	FESR	-----DIRECT-----	*****TOTAL*****	*****TOTAL*****										
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART						
22	STM088	COAL-F	0.	-0.004	0.	0.006	0.11	-1.	-2.	-0.	2.	3.	0.	0.17	66.	0.	21.	16.
24	STM088	COAL-F	0.	-0.005	0.	0.184	0.61	-2.	-3.	-0.	59.	101.	11.	0.58	-4950.	0.	-1525.	-818.
26	STM088	COAL-F	0.	-0.032	0.	0.054	0.10	-11.	-19.	-2.	16.	28.	3.	0.18	489.	0.	249.	196.
28	STM088	COAL-F	0.	-0.086	0.	0.142	0.24	-39.	-55.	-4.	35.	70.	10.	0.12	998.	6.	614.	393.
29	STM088	COAL-F	0.	-0.017	0.	0.029	0.07	-6.	-10.	-1.	9.	15.	2.	0.12	286.	0.	145.	112.
33	STM088	COAL-F	0.	-0.004	0.	0.006	0.00	-3.	-2.	-0.	-0.	3.	0.	0.01	46.	0.	-21.	17.
ALL	STM088	COAL-F	0.	-0.262	0.	0.626	0.12	-128.	-189.	-13.	159.	301.	46.	0.14	-6592.	13.	-2476.	-1020.
20	STM088	RESIDU	0.	-0.093	0.	0.155	0.38	-55.	12.	-5.	22.	138.	-4.	0.31	4264.	6.	144.	-239.
22	STM088	RESIDU	0.	-0.004	0.	0.006	0.11	-1.	3.	-0.	2.	8.	-1.	0.27	227.	0.	60.	3.
24	STM088	RESIDU	0.	-0.005	0.	0.184	0.61	-2.	-1.	-0.	59.	102.	11.	0.58	2708.	0.	497.	564.
26	STM088	RESIDU	0.	-0.032	0.	0.054	0.10	-11.	17.	-2.	15.	59.	-4.	0.27	1419.	0.	411.	70.
28	STM088	RESIDU	0.	-0.086	0.	0.142	0.24	-39.	118.	-4.	28.	217.	-25.	0.21	4344.	6.	872.	-364.
29	STM088	RESIDU	0.	-0.017	0.	0.029	0.07	-6.	26.	-1.	7.	46.	-5.	0.22	831.	0.	250.	-74.
33	STM088	RESIDU	0.	-0.004	0.	0.006	0.00	-3.	6.	-0.	-0.	10.	-1.	0.04	319.	0.	-189.	4.
ALL	STM088	RESIDU	0.	-0.262	0.	0.626	0.12	-128.	196.	-13.	144.	629.	-31.	0.23	15352.	13.	2224.	-39.
20	PFBSTM	COAL-P	0.	-0.130	0.	0.211	0.52	51.	-99.	8.	162.	91.	32.	0.52	-4315.	17.	-2031.	-1178.
22	PFBSTM	COAL-P	0.	-0.006	0.	0.009	0.18	4.	-4.	1.	9.	5.	1.	0.49	71.	1.	24.	9.
24	PFBSTM	COAL-P	0.	-0.067	0.	0.227	0.75	-5.	-40.	-1.	90.	121.	16.	0.72	-4335.	11.	-1176.	-711.
26	PFBSTM	COAL-P	0.	-0.061	0.	0.095	0.17	30.	-36.	3.	80.	49.	13.	0.51	975.	6.	420.	235.
28	PFBSTM	COAL-P	0.	-0.501	0.	0.697	1.18	639.	-307.	80.	1025.	349.	152.	0.46	5325.	49.	2374.	1104.
29	PFBSTM	COAL-P	0.	-0.038	0.	0.058	0.14	32.	-23.	4.	63.	30.	10.	0.47	668.	5.	277.	137.
33	PFBSTM	COAL-P	0.	-0.012	0.	0.017	0.01	5.	-7.	1.	14.	9.	2.	0.17	207.	0.	39.	52.
ALL	PFBSTM	COAL-P	0.	-1.081	0.	1.744	0.33	1003.	-684.	127.	1914.	866.	301.	0.46	-1863.	118.	-95.	-466.
20	TISTMT	COAL	0.	-0.145	0.	0.231	0.56	-65.	-105.	-7.	57.	104.	19.	0.34	-24836.	22.	-6933.	-4042.
22	TISTMT	COAL	0.	-0.007	0.	0.011	0.20	-2.	-4.	-0.	3.	6.	1.	0.31	-397.	1.	-81.	-52.
24	TISTMT	COAL	0.	-0.086	0.	0.232	0.77	-31.	-52.	-4.	72.	122.	15.	0.65	-18718.	15.	-4508.	-2627.
26	TISTMT	COAL	0.	-0.071	0.	0.112	0.20	-25.	-42.	-4.	34.	58.	7.	0.35	-1823.	9.	-155.	-103.
28	TISTMT	COAL	0.	-0.366	0.	0.578	0.98	-137.	-226.	-18.	167.	292.	39.	0.27	-13905.	58.	-1867.	-1312.
29	TISTMT	COAL	0.	-0.044	0.	0.069	0.17	-15.	-26.	-2.	21.	36.	5.	0.29	-1010.	7.	-57.	-60.
33	TISTMT	COAL	0.	-0.015	0.	0.024	0.02	-7.	-9.	-1.	6.	12.	2.	0.13	-695.	0.	-148.	-44.
ALL	TISTMT	COAL	0.	-0.946	0.	1.621	0.30	-363.	-598.	-47.	464.	810.	111.	0.29	-79065.	145.	-17706.	-10614.
20	TISTMT	RESIDU	0.	-0.135	0.	0.216	0.53	-61.	-24.	-7.	50.	160.	3.	0.41	-15952.	20.	-4710.	-3125.

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COGENERATION TECHNOLOGY ALTERNATIVES STUDY

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9
REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL
(SAVINGS ARE POSITIVE)
TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---							
		ECS	*****DIRECT*****	TOTAL	FESR	*****DIRECT*****	TOTAL	*****DIRECT*****	TOTAL	EMSR	SAVING	TOTAL	COST				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	LAEC			
													MWH	SAVED			
22	TISTMT	RESIDU	0.	-0.007	0.	0.011	0.20	-2.	0.	-0.	3.	9.	-0.039	-231.	1.	-47.	-59.
24	TISTMT	RESIDU	0.	-0.002	0.	0.003	0.01	-2.	0.	-0.	0.	3.	-0.002	216.	0.	-59.	39.
26	TISTMT	RESIDU	0.	-0.065	0.	0.103	0.19	-23.	2.	-3.	30.	88.	-2.038	-875.	6.	-26.	-237.
28	TISTMT	RESIDU	0.	-0.350	0.	0.552	0.94	-131.	32.	-17.	150.	488.	-12.034	-7592.	54.	-1345.	-2219.
29	TISTMT	RESIDU	0.	-0.044	0.	0.069	0.17	-15.	4.	-2.	20.	62.	-2.037	-471.	7.	24.	-208.
33	TISTMT	RESIDU	0.	-0.014	0.	0.022	0.01	-7.	3.	-1.	4.	21.	-1.012	-437.	0.	-363.	-90.
ALL	TISTMT	RESIDU	0.	-0.868	0.	1.374	0.26	-340.	24.	-43.	361.	1169.	-20.036	-35654.	124.	-9182.	-8298.
20	TIHRSG	COAL	0.	-0.105	0.	0.123	0.30	-59.	-89.	-5.	15.	40.	13.016	-34595.	5.	-8990.	-4823.
22	TIHRSG	COAL	0.	-0.006	0.	0.006	0.11	-2.	-4.	-0.	2.	3.	0.015	-582.	0.	-131.	-74.
24	TIHRSG	COAL	0.	-0.089	0.	0.183	0.60	-32.	-53.	-4.	56.	95.	12.052	-30459.	7.	-7286.	-4105.
26	TIHRSG	COAL	0.	-0.067	0.	0.056	0.10	-23.	-40.	-3.	16.	27.	4.017	-2944.	1.	-543.	-264.
28	TIHRSG	COAL	0.	-1.355	0.	0.488	0.83	-490.	-820.	-68.	104.	189.	43.016	-59962.	101.	-12652.	-8145.
29	TIHRSG	COAL	0.	-0.055	0.	0.030	0.07	-19.	-33.	-3.	8.	13.	2.011	-1675.	3.	-302.	-187.
33	TIHRSG	COAL	0.	-0.016	0.	0.010	0.01	-7.	-10.	-1.	1.	4.	1.004	-788.	0.	-196.	-86.
ALL	TIHRSG	COAL	0.	-2.242	0.	1.185	0.22	-838.	-1390.	-112.	266.	491.	100.014	-68188.	155.	-39861.	-23417.
20	TIHRSG	RESIDU	0.	-0.093	0.	0.110	0.27	-54.	12.	-5.	9.	113.	-6.026	-21856.	4.	-5800.	-3412.
22	TIHRSG	RESIDU	0.	-0.006	0.	0.006	0.11	-2.	2.	-0.	1.	7.	-1.025	-368.	0.	-84.	-79.
24	TIHRSG	RESIDU	0.	-0.002	0.	0.001	0.00	-2.	0.	-0.	-1.	2.	-0.001	235.	0.	-49.	52.
26	TIHRSG	RESIDU	0.	-0.056	0.	0.047	0.09	-20.	13.	-3.	12.	62.	-6.022	-1527.	0.	-324.	-397.
28	TIHRSG	RESIDU	0.	-0.822	0.	0.292	0.50	-297.	9.	-41.	43.	543.	-76.020	-23161.	60.	-5860.	-6568.
29	TIHRSG	RESIDU	0.	-0.055	0.	0.030	0.07	-19.	5.	-3.	6.	46.	-5.022	-995.	3.	-199.	-366.
33	TIHRSG	RESIDU	0.	-0.015	0.	0.009	0.01	-7.	2.	-1.	0.	13.	-1.005	-516.	0.	-409.	-121.
ALL	TIHRSG	RESIDU	0.	-1.485	0.	0.699	0.13	-567.	62.	-74.	99.	1113.	-136.021	-68188.	96.	-18005.	-15412.
20	STIRL	COAL	0.	-0.187	0.	0.183	0.45	-77.	-127.	-9.	43.	78.	16.023	-558.	24.	-1148.	-751.
22	STIRL	COAL	0.	-0.011	0.	0.009	0.16	-4.	-6.	-1.	2.	4.	1.023	14.	1.	11.	-4.
24	STIRL	COAL	0.	-0.159	0.	0.177	0.58	-56.	-95.	-8.	52.	88.	12.047	-695.	18.	-298.	-260.
26	STIRL	COAL	0.	-0.112	0.	0.089	0.16	-39.	-67.	-6.	26.	43.	6.025	-49.	11.	223.	65.
28	STIRL	COAL	0.	-0.633	0.	0.470	0.80	-231.	-386.	-32.	125.	218.	35.020	-1280.	70.	933.	26.
29	STIRL	COAL	0.	-0.070	0.	0.051	0.12	-25.	-42.	-4.	14.	24.	4.020	-150.	8.	111.	6.
33	STIRL	COAL	0.	-0.031	0.	0.023	0.01	-12.	-18.	-2.	5.	11.	2.012	-79.	0.	-5.	37.
ALL	STIRL	COAL	0.	-1.556	0.	1.296	0.24	-574.	-961.	-78.	345.	603.	97.021	-3618.	171.	-224.	-1181.
20	STIRL	DISTIL	0.	-0.176	0.	0.172	0.42	-27.	0.	4.	85.	192.	27.060	5084.	22.	64.	-668.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 4

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING\$*****				- - EMISSIONS SAVING\$ - - -						CAPITL--ELECTRIC POWER--						
		*****DIRECT*****		TOTAL		FESR		DIRECT		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED	
															MWH			
22	STIRL	DISTIL	0.	-0.011	0.	0.009	0.16	-1.	1.	0.	5.	12.	1.	0.59	174.	1.	30.	-35.
24	STIRL	DISTIL	0.	-0.004	0.	0.003	0.01	-1.	1.	0.	1.	4.	0.	0.05	477.	0.	-70.	74.
26	STIRL	DISTIL	0.	-0.105	0.	0.083	0.15	-8.	13.	3.	52.	116.	14.	0.59	1254.	8.	316.	-262.
28	STIRL	DISTIL	0.	-0.608	0.	0.452	0.77	-46.	96.	18.	295.	676.	82.	0.55	6160.	67.	648.	-2264.
29	STIRL	DISTIL	0.	-0.070	0.	0.051	0.12	-4.	13.	2.	35.	79.	9.	0.58	635.	8.	165.	-280.
33	STIRL	DISTIL	0.	-0.028	0.	0.021	0.01	-4.	5.	1.	12.	31.	4.	0.24	401.	0.	-294.	-53.
ALL	STIRL	DISTIL	0.	-1.408	0.	1.111	0.21	-128.	180.	39.	683.	1562.	194.	0.55	19948.	149.	1207.	-4905.
20	STIRL	RESIDU	0.	-0.176	0.	0.172	0.42	-72.	-44.	-18.	37.	137.	-10.	0.32	5075.	22.	191.	-360.
22	STIRL	RESIDU	0.	-0.011	0.	0.009	0.16	-4.	-2.	-1.	2.	8.	-1.	0.31	174.	1.	38.	-16.
24	STIRL	RESIDU	0.	-0.004	0.	0.003	0.01	-2.	-0.	-0.	-0.	3.	-0.	0.02	477.	0.	9.	81.
26	STIRL	RESIDU	0.	-0.105	0.	0.083	0.15	-37.	-15.	-10.	22.	81.	-9.	0.30	1252.	8.	394.	-66.
28	STIRL	RESIDU	0.	-0.608	0.	0.452	0.77	-222.	-78.	-68.	108.	459.	-63.	0.26	6147.	67.	1404.	-1061.
29	STIRL	RESIDU	0.	-0.070	0.	0.051	0.12	-25.	-8.	-8.	13.	53.	-8.	0.27	633.	8.	216.	-138.
33	STIRL	RESIDU	0.	-0.028	0.	0.021	0.01	-12.	-3.	-2.	3.	21.	-2.	0.11	400.	0.	-157.	2.
ALL	STIRL	RESIDU	0.	-1.408	0.	1.111	0.21	-525.	-212.	-153.	261.	1071.	-130.	0.27	19913.	149.	2946.	-2192.
20	HEGT85	COAL-A	0.	-0.225	0.	0.158	0.39	-25.	-147.	-11.	98.	64.	14.	0.34	-14767.	27.	-4391.	-2656.
22	HEGT85	COAL-A	0.	-0.022	0.	0.005	0.10	-3.	-13.	-1.	6.	2.	1.	0.25	-155.	2.	-39.	-53.
24	HEGT85	COAL-A	0.	-0.062	0.	0.015	0.05	-11.	-37.	-3.	13.	5.	1.	0.28	-2111.	7.	-635.	-450.
26	HEGT85	COAL-A	0.	-0.251	0.	0.041	0.08	-41.	-151.	-13.	54.	9.	5.	0.22	-517.	25.	39.	-312.
28	HEGT85	COAL-A	0.	-0.363	0.	0.090	0.15	-55.	-220.	-18.	91.	28.	9.	0.25	-1890.	21.	-164.	-292.
33	HEGT85	COAL-A	0.	-0.051	0.	0.009	0.01	-10.	-31.	-3.	10.	2.	1.	0.20	-538.	4.	-107.	-105.
ALL	HEGT85	COAL-A	0.	-1.031	0.	0.335	0.06	-153.	-633.	-52.	287.	116.	32.	0.25	-21139.	91.	-5605.	-4092.
20	HEGT60	COAL-A	0.	-0.274	0.	0.127	0.31	-26.	-180.	-14.	103.	42.	13.	0.30	-16983.	26.	-5052.	-3025.
22	HEGT60	COAL-A	0.	-0.017	0.	0.005	0.09	-1.	-10.	-1.	6.	2.	0.	0.26	-187.	2.	-44.	-46.
24	HEGT60	COAL-A	0.	-0.239	0.	0.064	0.21	-43.	-143.	-12.	54.	22.	6.	0.27	-7892.	22.	-2079.	-1451.
26	HEGT60	COAL-A	0.	-0.196	0.	0.045	0.08	-23.	-118.	-10.	55.	14.	4.	0.25	-390.	17.	62.	-170.
28	HEGT60	COAL-A	0.	-0.512	0.	0.110	0.19	-60.	-313.	-26.	141.	28.	12.	0.22	-4111.	33.	-561.	-680.
29	HEGT60	COAL-A	0.	-0.174	0.	0.003	0.01	-24.	-105.	-9.	33.	-7.	2.	0.13	-114.	15.	41.	-201.
33	HEGT60	COAL-A	0.	-0.191	0.	0.012	0.01	-31.	-115.	-10.	34.	-3.	2.	0.15	-733.	3.	-205.	-139.
ALL	HEGT60	COAL-A	0.	-1.770	0.	0.405	0.08	-230.	-1086.	-89.	470.	108.	45.	0.23	-33566.	130.	-8651.	-6305.
20	HEGT00	COAL-A	0.	-0.215	0.	0.088	0.22	-4.	-152.	-11.	95.	17.	12.	0.25	-15415.	12.	-4458.	-2428.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED				
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH				
22	HEGT00	COAL-A	0.	-0.012	0.	0.004	0.07	1.	-7.	-1.	6.	1.	0. 0.24 -155.	1.	-35.	-29.
24	HEGT00	COAL-A	0.	-0.194	0.	0.105	0.34	-35.	-116.	-10.	61.	47.	8. 0.38-10559.	13.	-2623.	-1579.
26	HEGT00	COAL-A	0.	-0.128	0.	0.037	0.07	-2.	-77.	-6.	51.	14.	3. 0.24 -330.	7.	42.	-37.
28	HEGT00	COAL-A	0.	-2.040	0.	0.397	0.68	12.	-1232.	-102.	796.	102.	44. 0.29-12208.	162.	-1498.	-2832.
29	HEGT00	COAL-A	0.	-0.091	0.	0.020	0.05	2.	-55.	-5.	38.	6.	2. 0.21 28.	7.	84.	-32.
33	HEGT00	COAL-A	0.	-0.034	0.	0.008	0.01	-4.	-21.	-2.	10.	3.	1. 0.09 -112.	0.	-41.	-1.
ALL	HEGT00	COAL-A	0.	-3.714	0.	0.902	0.17	-41.	-2270.	-186.	1446.	261.	96. 0.25-53020.	275.	-11669.	-9493.
20	FCMCCL	COAL	0.	-0.168	0.	0.174	0.42	56.	101.	9.	166.	289.	32. 1.00 -9746.	21.	-3165.	-1946.
22	FCMCCL	COAL	0.	-0.010	0.	0.011	0.20	4.	7.	1.	11.	18.	2. 1.00 -77.	2.	-9.	-19.
26	FCMCCL	COAL	0.	-0.160	0.	0.096	0.18	38.	66.	5.	121.	206.	20. 1.00 163.	16.	253.	-16.
28	FCMCCL	COAL	0.	-0.699	0.	0.751	1.28	284.	492.	38.	751.	1285.	124. 0.97 -1778.	106.	1106.	-333.
29	FCMCCL	COAL	0.	-0.066	0.	0.075	0.18	29.	49.	4.	74.	126.	12. 1.00 414.	10.	268.	61.
33	FCMCCL	COAL	0.	-0.080	0.	0.033	0.02	11.	23.	2.	47.	84.	8. 0.64 97.	0.	20.	49.
ALL	FCMCCL	COAL	0.	-1.764	0.	1.700	0.32	630.	1101.	85.	1745.	2999.	295. 0.97-16300.	232.	-2278.	-3287.
20	FCSTCL	COAL	0.	-0.195	0.	0.232	0.57	39.	71.	6.	177.	306.	33. 1.00 -7126.	33.	-2797.	-1800.
22	FCSTCL	COAL	0.	-0.010	0.	0.013	0.24	3.	5.	0.	11.	18.	2. 1.00 -33.	2.	3.	-16.
24	FCSTCL	COAL	0.	-0.267	0.	0.048	0.16	0.	1.	-1.	108.	184.	19. 1.00 -4638.	24.	-1473.	-1222.
26	FCSTCL	COAL	0.	-0.147	0.	0.121	0.22	27.	46.	3.	113.	193.	19. 1.00 469.	19.	383.	33.
28	FCSTCL	COAL	0.	-0.622	0.	0.726	1.23	185.	322.	24.	619.	1061.	105. 0.97 1164.	91.	1799.	312.
29	FCSTCL	COAL	0.	-0.070	0.	0.067	0.21	23.	39.	3.	73.	125.	12. 1.00 546.	13.	330.	78.
33	FCSTCL	COAL	0.	-0.083	0.	0.047	0.03	10.	21.	1.	52.	92.	9. 0.80 224.	0.	79.	92.
ALL	FCSTCL	COAL	0.	-2.014	0.	1.812	0.34	409.	719.	54.	1641.	2815.	285. 0.93-13366.	257.	-2370.	-3730.
20	IGGTST	COAL	0.	-0.210	0.	0.162	0.39	-83.	-138.	6.	37.	67.	31. 0.30 -8622.	26.	-3143.	-2077.
22	IGGTST	COAL	0.	-0.012	0.	0.009	0.17	-4.	-7.	0.	3.	4.	2. 0.28 -44.	2.	-1.	-15.
26	IGGTST	COAL	0.	-0.189	0.	0.078	0.14	-66.	-113.	4.	20.	33.	20. 0.22 411.	17.	351.	37.
28	IGGTST	COAL	0.	-0.639	0.	0.439	0.75	-230.	-389.	26.	117.	202.	91. 0.23 93.	71.	1255.	126.
29	IGGTST	COAL	0.	-0.079	0.	0.059	0.14	-28.	-47.	3.	17.	28.	12. 0.27 361.	10.	267.	67.
33	IGGTST	COAL	0.	-0.154	0.	0.023	0.01	-58.	-93.	2.	-1.	4.	13. 0.09 148.	0.	10.	64.
ALL	IGGTST	COAL	0.	-1.839	0.	1.104	0.21	-673.	-1129.	61.	275.	485.	240. 0.25-10975.	179.	-1807.	-2579.
20	GTSQAR	RESIDU	-0.329	0.140	-0.329	0.509	0.44	-55.	-40.	4.	64.	162.	26. 0.53 4646.	23.	79.	-427.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - -				CAPITL--ELECTRIC POWER---								
		ECS ****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED						
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH						
22	GTSOAR	RESIDU	-0.023	0.012	-0.023	0.032	0.18	-2.	-2.	0.	5.	10.	2.	0.53	226.	2.	51.	-9.
24	GTSOAR	RESIDU	-0.010	0.005	-0.010	0.014	0.01	-0.	-1.	0.	2.	4.	1.	0.07	448.	0.	8.	80.
26	GTSOAR	RESIDU	-0.233	0.116	-0.233	0.327	0.17	-11.	-18.	4.	57.	97.	16.	0.54	1829.	11.	545.	-1.
28	GTSOAR	RESIDU	-1.857	0.789	-1.857	2.490	1.08	-193.	-226.	25.	354.	704.	125.	0.49	13277.	129.	3210.	-1159.
29	GTSOAR	RESIDU	-0.163	0.075	-0.163	0.223	0.15	-15.	-17.	2.	33.	64.	11.	0.51	1096.	11.	328.	-91.
33	GTSOAR	RESIDU	-0.078	0.036	-0.078	0.107	0.02	-5.	-7.	1.	17.	31.	5.	0.28	717.	0.	-28.	47.
ALL	GTSOAR	RESIDU	-3.901	1.699	-3.901	5.362	0.27	-406.	-449.	54.	773.	1554.	271.	0.50	32218.	255.	6074.	-2260.
20	GTAC08	RESIDU	0.	-0.164	0.	0.180	0.44	-169.	-34.	-19.	-61.	144.	-11.	0.16	5559.	19.	420.	-179.
22	GTAC08	RESIDU	0.	-0.009	0.	0.010	0.19	-9.	-1.	-1.	-3.	9.	-1.	0.17	240.	1.	60.	-0.
24	GTAC08	RESIDU	0.	-0.003	0.	0.004	0.01	-2.	-0.	-0.	-0.	3.	-0.	0.03	486.	0.	17.	88.
26	GTAC08	RESIDU	0.	-0.088	0.	0.100	0.18	-72.	-8.	-9.	-14.	88.	-7.	0.21	1892.	8.	602.	83.
28	GTAC08	RESIDU	0.	-0.641	0.	0.726	1.23	-629.	-64.	-74.	-201.	635.	-57.	0.17	13026.	97.	3831.	-157.
29	GTAC08	RESIDU	0.	-0.060	0.	0.069	0.17	-60.	-6.	-7.	-19.	61.	-6.	0.17	1133.	9.	386.	-20.
33	GTAC08	RESIDU	0.	-0.023	0.	0.027	0.02	-19.	-2.	-2.	-3.	24.	-1.	0.08	602.	0.	-61.	54.
ALL	GTAC08	RESIDU	0.	-1.452	0.	1.639	0.31	-1410.	-170.	-165.	-442.	1416.	-122.	0.17	33711.	196.	7722.	-192.
20	GTAC12	RESIDU	0.	-0.173	0.	0.198	0.48	-167.	-41.	-19.	-50.	152.	-9.	0.19	5762.	23.	397.	-218.
22	GTAC12	RESIDU	0.	-0.010	0.	0.011	0.20	-9.	-2.	-1.	-2.	9.	-1.	0.19	238.	2.	58.	-2.
24	GTAC12	RESIDU	0.	-0.004	0.	0.004	0.01	-2.	-1.	-0.	0.	4.	-0.	0.04	494.	0.	22.	89.
26	GTAC12	RESIDU	0.	-0.099	0.	0.109	0.20	-77.	-16.	-9.	-12.	91.	-6.	0.23	1900.	10.	613.	69.
28	GTAC12	RESIDU	0.	-0.708	0.	0.790	1.34	-640.	-114.	-77.	-170.	659.	-50.	0.19	13067.	110.	3919.	-126.
29	GTAC12	RESIDU	0.	-0.068	0.	0.074	0.18	-61.	-11.	-7.	-16.	62.	-5.	0.19	1141.	11.	392.	-22.
33	GTAC12	RESIDU	0.	-0.030	0.	0.033	0.02	-23.	-5.	-3.	-3.	28.	-2.	0.10	689.	0.	-20.	69.
ALL	GTAC12	RESIDU	0.	-1.601	0.	1.789	0.34	-1436.	-278.	-170.	-371.	1474.	-106.	0.19	34168.	228.	7895.	-206.
20	GTAC16	RESIDU	0.	-0.180	0.	0.205	0.50	-167.	-46.	-19.	-45.	155.	-8.	0.21	5531.	25.	297.	-292.
22	GTAC16	RESIDU	0.	-0.010	0.	0.011	0.21	-9.	-2.	-1.	-2.	9.	-1.	0.20	231.	2.	56.	-4.
24	GTAC16	RESIDU	0.	-0.005	0.	0.005	0.02	-3.	-1.	-0.	0.	4.	-0.	0.04	491.	0.	22.	89.
26	GTAC16	RESIDU	0.	-0.106	0.	0.112	0.20	-80.	-20.	-10.	-11.	92.	-6.	0.23	1859.	12.	602.	50.
28	GTAC16	RESIDU	0.	-0.808	0.	0.805	1.37	-682.	-169.	-82.	-175.	666.	-50.	0.19	12935.	121.	3815.	-306.
29	GTAC16	RESIDU	0.	-0.074	0.	0.075	0.18	-63.	-15.	-8.	-16.	62.	-5.	0.19	1120.	12.	382.	-35.
33	GTAC16	RESIDU	0.	-0.036	0.	0.037	0.02	-27.	-7.	-3.	-4.	30.	-2.	0.12	741.	0.	5.	74.
ALL	GTAC16	RESIDU	0.	-1.786	0.	1.830	0.34	-1508.	-382.	-180.	-370.	1492.	-104.	0.20	33553.	251.	7586.	-619.
20	GTWC16	RESIDU	0.	-0.212	0.	0.185	0.45	-183.	-60.	-21.	-58.	147.	-11.	0.16	5282.	27.	114.	-458.

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ALTERNATIVES STUDY

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING\$****				*****EMISSIONS SAVING\$****						CAPITL--ELECTRIC POWER---			
		ECS *****DIRECT*****	TOTAL	FESR	DIRECT	NOX	SOX	PART	NOX	SOX	PART	EMSR SAVING	TOTAL EXPORT	COST LAEC	SAVED
		FUEL OIL+GAS	COAL OIL+GAS	COAL									MWH		
22	GTWC16	RESIDU	0.	-0.012	0.	0.010	0.19	-10.	-3.	-1.	-3.	9.	-1.	0.17	235.
24	GTWC16	RESIDU	0.	-0.005	0.	0.005	0.02	-3.	-1.	-0.	0.	4.	-0.	0.04	462.
26	GTWC16	RESIDU	0.	-0.117	0.	0.103	0.19	-86.	-26.	-11.	-17.	88.	-7.	0.20	1926.
28	GTWC16	RESIDU	0.	-0.856	0.	0.755	1.28	-708.	-190.	-86.	-202.	643.	-55.	0.17	13310.
29	GTWC16	RESIDU	0.	-0.080	0.	0.070	0.17	-66.	-17.	-8.	-19.	60.	-5.	0.17	1196.
33	GTWC16	RESIDU	0.	-0.040	0.	0.035	0.02	-29.	-9.	-3.	-5.	30.	-2.	0.10	774.
ALL	GTWC16	RESIDU	0.	-1.943	0.	1.711	0.32	-1594.	-440.	-191.	-446.	1442.	-118.	0.17	34098.
20	CC1626	RESIDU	0.	-0.245	0.	0.218	0.53	-183.	-82.	-22.	-37.	162.	-7.	0.23	5883.
22	CC1626	RESIDU	0.	-0.013	0.	0.012	0.22	-10.	-4.	-1.	-2.	9.	-1.	0.21	241.
24	CC1626	RESIDU	0.	-0.008	0.	0.007	0.02	-4.	-2.	-0.	1.	5.	-0.	0.06	473.
26	CC1626	RESIDU	0.	-0.134	0.	0.115	0.21	-92.	-38.	-11.	-13.	92.	-5.	0.23	1957.
28	CC1626	RESIDU	0.	-0.391	0.	0.330	0.56	-293.	-112.	-36.	-66.	264.	-18.	0.20	5392.
29	CC1626	RESIDU	0.	-0.091	0.	0.077	0.19	-68.	-25.	-8.	-16.	62.	-4.	0.20	1237.
33	CC1626	RESIDU	0.	-0.054	0.	0.045	0.03	-37.	-15.	-4.	-6.	37.	-2.	0.14	963.
ALL	CC1626	RESIDU	0.	-1.255	0.	1.075	0.20	-921.	-373.	-112.	-186.	844.	-50.	0.20	21628.
20	CC1622	RESIDU	0.	-0.229	0.	0.223	0.55	-177.	-75.	-21.	-34.	164.	-7.	0.24	5935.
22	CC1622	RESIDU	0.	-0.012	0.	0.012	0.22	-10.	-3.	-1.	-2.	9.	-1.	0.22	235.
24	CC1622	RESIDU	0.	-0.007	0.	0.006	0.02	-3.	-2.	-0.	1.	5.	-0.	0.05	496.
26	CC1622	RESIDU	0.	-0.125	0.	0.118	0.22	-87.	-33.	-11.	-11.	93.	-5.	0.24	1872.
28	CC1622	RESIDU	0.	-0.357	0.	0.330	0.56	-277.	-96.	-34.	-60.	262.	-17.	0.20	5063.
29	CC1622	RESIDU	0.	-0.085	0.	0.078	0.19	-66.	-22.	-8.	-14.	63.	-4.	0.21	1168.
33	CC1622	RESIDU	0.	-0.049	0.	0.044	0.03	-34.	-12.	-4.	-5.	36.	-2.	0.14	890.
ALL	CC1622	RESIDU	0.	-1.155	0.	1.084	0.20	-874.	-324.	-106.	-167.	845.	-47.	0.21	20923.
20	CC1222	RESIDU	0.	-0.227	0.	0.225	0.55	-176.	-74.	-21.	-32.	165.	-7.	0.24	6255.
22	CC1222	RESIDU	0.	-0.012	0.	0.012	0.22	-9.	-3.	-1.	-2.	9.	-1.	0.23	242.
24	CC1222	RESIDU	0.	-0.007	0.	0.006	0.02	-3.	-2.	-0.	1.	5.	-0.	0.05	510.
26	CC1222	RESIDU	0.	-0.124	0.	0.119	0.22	-87.	-33.	-11.	-10.	93.	-5.	0.25	1922.
28	CC1222	RESIDU	0.	-0.353	0.	0.332	0.57	-274.	-94.	-33.	-58.	263.	-16.	0.21	5213.
29	CC1222	RESIDU	0.	-0.084	0.	0.079	0.19	-65.	-22.	-8.	-14.	63.	-4.	0.21	1202.
33	CC1222	RESIDU	0.	-0.048	0.	0.044	0.03	-34.	-12.	-4.	-5.	36.	-2.	0.14	914.
ALL	CC1222	RESIDU	0.	-1.142	0.	1.092	0.21	-866.	-319.	-105.	-161.	848.	-46.	0.21	21718.
20	CC0822	RESIDU	0.	-0.201	0.	0.228	0.56	-167.	-60.	-19.	-31.	166.	-6.	0.25	5813.

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

		*****FUEL SAVINGS*****				- - - EMISSIONS SAVINGS - - -						CAPITL--ELECTRIC POWER---						
PROCS	ECS	ECS *****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC							
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	SAVED						
											MWH							
22	CC0822	RESIDU	0.	-0.011	0.	0.012	0.22	-9.	-2.	-1.	-2.	9.	-1.	0.23	241.	2.	58.	-3.
24	CC0822	RESIDU	0.	-0.005	0.	0.005	0.02	-3.	-1.	-0.	0.	4.	-0.	0.04	485.	0.	9.	74.
26	CC0822	RESIDU	0.	-0.108	0.	0.119	0.22	-79.	-24.	-10.	-8.	94.	-5.	0.26	1947.	14.	632.	59.
28	CC0822	RESIDU	0.	-0.295	0.	0.320	0.54	-249.	-64.	-30.	-55.	256.	-16.	0.21	4965.	40.	1414.	39.
29	CC0822	RESIDU	0.	-0.073	0.	0.079	0.19	-61.	-15.	-7.	-14.	64.	-4.	0.22	1208.	12.	412.	-15.
33	CC0822	RESIDU	0.	-0.037	0.	0.039	0.02	-27.	-7.	-3.	-3.	32.	-2.	0.12	827.	0.	5.	81.
ALL	CC0822	RESIDU	0.	-0.968	0.	1.065	0.20	-790.	-229.	-94.	-149.	830.	-44.	0.22	20546.	132.	3509.	-373.
20	STIG15	RESIDU	0.	-0.480	0.	0.100	0.25	-290.	-191.	-14.	-107.	112.	1.	0.01	8826.	54.	-203.	-1185.
22	STIG15	RESIDU	0.	-0.026	0.	0.006	0.10	-16.	-10.	-1.	-6.	6.	0.	0.01	267.	3.	23.	-46.
24	STIG15	RESIDU	0.	-0.094	0.	0.020	0.06	-51.	-37.	-3.	-15.	22.	-0.	0.06	597.	8.	65.	-128.
26	STIG15	RESIDU	0.	-0.267	0.	0.056	0.10	-161.	-106.	-8.	-59.	62.	0.	0.01	2032.	30.	316.	-416.
28	STIG15	RESIDU	0.	-0.557	0.	0.116	0.20	-336.	-221.	-17.	-124.	130.	1.	0.01	4215.	61.	622.	-861.
33	STIG15	RESIDU	0.	-0.056	0.	0.012	0.01	-34.	-22.	-2.	-13.	13.	0.	0.01	435.	6.	54.	-91.
ALL	STIG15	RESIDU	0.	-1.757	0.	0.367	0.07	-1054.	-698.	-53.	-384.	410.	2.	0.01	19440.	192.	1041.	-3237.
20	STIG10	RESIDU	0.	-0.388	0.	0.128	0.31	-254.	-146.	-10.	-91.	123.	3.	0.07	7203.	45.	-221.	-1020.
22	STIG10	RESIDU	0.	-0.021	0.	0.007	0.13	-14.	-8.	-1.	-5.	7.	0.	0.07	252.	3.	32.	-34.
24	STIG10	RESIDU	0.	-0.026	0.	0.009	0.03	-10.	-10.	-1.	1.	9.	-0.	0.08	511.	0.	31.	62.
26	STIG10	RESIDU	0.	-0.216	0.	0.071	0.13	-135.	-78.	-6.	-45.	71.	1.	0.08	1968.	24.	400.	-272.
28	STIG10	RESIDU	0.	-0.440	0.	0.145	0.25	-285.	-162.	-12.	-100.	143.	3.	0.08	3777.	36.	712.	-388.
33	STIG10	RESIDU	0.	-0.045	0.	0.015	0.01	-31.	-16.	-1.	-12.	15.	0.	0.05	406.	4.	70.	-42.
ALL	STIG10	RESIDU	0.	-1.364	0.	0.449	0.08	-874.	-504.	-37.	-303.	441.	7.	0.08	16939.	133.	1228.	-2032.
20	STIG1S	RESIDU	0.	-0.341	0.	0.134	0.33	-237.	-122.	-8.	-88.	125.	3.	0.09	6585.	38.	-161.	-891.
22	STIG1S	RESIDU	0.	-0.019	0.	0.007	0.14	-13.	-6.	-0.	-5.	7.	0.	0.09	258.	2.	39.	-26.
24	STIG1S	RESIDU	0.	-0.015	0.	0.006	0.02	-6.	-5.	-1.	0.	6.	-0.	0.05	491.	0.	20.	72.
26	STIG1S	RESIDU	0.	-0.190	0.	0.075	0.14	-123.	-63.	-5.	-40.	74.	1.	0.11	1986.	20.	440.	-201.
28	STIG1S	RESIDU	0.	-0.376	0.	0.148	0.25	-257.	-129.	-9.	-92.	144.	3.	0.09	3623.	24.	732.	-184.
33	STIG1S	RESIDU	0.	-0.039	0.	0.016	0.01	-30.	-13.	-1.	-12.	15.	0.	0.05	392.	2.	76.	-16.
ALL	STIG1S	RESIDU	0.	-1.175	0.	0.462	0.09	-798.	-405.	-29.	-283.	444.	8.	0.10	15979.	104.	1374.	-1496.
20	DEADV3	RESIDU	0.	-0.227	0.	0.190	0.46	-300.	-74.	-21.	-168.	144.	-8.	-0.09	1911.	32.	-806.	-1010.
22	DEADV3	RESIDU	0.	-0.017	0.	0.009	0.18	-20.	-6.	-1.	-11.	8.	-1.	-0.13	120.	2.	14.	-36.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING*****				*****EMISSIONS SAVING*****				*****CAPITL--ELECTRIC POWER---			
		*****DIRECT*****		TOTAL		FESR		DIRECT		TOTAL		EMSR	SAVING
		FUEL OIL+GAS	COAL OIL+GAS	COAL	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	TOTAL
													LAEC
													SAVED
24	DEADV3 RESIDU	0.	-0.017	0.	0.008	0.03	-7.	-6.	-1.	1.	7.	-0.0.08	209.
26	DEADV3 RESIDU	0.	-0.177	0.	0.093	0.17	-188.	-60.	-14.	-103.	81.	-8.-0.10	900.
28	DEADV3 RESIDU	0.	-0.520	0.	0.277	0.47	-589.	-179.	-44.	-338.	237.	-23.-0.12	2373.
33	DEADV3 RESIDU	0.	-0.102	0.	0.046	0.03	-103.	-36.	-8.	-56.	42.	-4.-0.14	561.
ALL	DEADV3 RESIDU	0.	-1.343	0.	0.791	0.15	-1528.	-456.	-113.	-854.	658.	-57.-0.11	7688.
20	DEHTPM RESIDU	0.	-0.171	0.	0.233	0.57	-277.	-45.	-18.	-149.	167.	-5.0.04	1884.
22	DEHTPM RESIDU	0.	-0.010	0.	0.012	0.22	-16.	-2.	-1.	-9.	9.	-1.-0.02	132.
24	DEHTPM RESIDU	0.	-0.005	0.	0.005	0.02	-3.	-1.	-0.	0.	4.	-0.0.04	458.
26	DEHTPM RESIDU	0.	-0.106	0.	0.113	0.21	-139.	-21.	-10.	-70.	92.	-5.0.03	935.
28	DEHTPM RESIDU	0.	-0.677	0.	0.580	0.99	-1050.	-138.	-69.	-655.	510.	-49.-0.10	3532.
29	DEHTPM RESIDU	0.	-0.079	0.	0.062	0.15	-124.	-16.	-8.	-80.	57.	-6.-0.14	359.
33	DEHTPM RESIDU	0.	-0.040	0.	0.034	0.02	-48.	-8.	-3.	-24.	30.	-2.-0.02	326.
ALL	DEHTPM RESIDU	0.	-1.520	0.	1.448	0.27	-2311.	-321.	-153.	-1378.	1214.	-96.-0.08	10641.
20	DESQA3 DISTIL	-0.314	0.076	-0.314	0.485	0.42	-654.	5.	4.	-525.	218.	14.-0.62	1642.
22	DESQA3 DISTIL	-0.024	0.005	-0.024	0.032	0.15	-44.	-1.	0.	-35.	13.	1.-0.70	50.
24	DESQA3 DISTIL	-0.027	0.005	-0.027	0.035	0.03	-0.	-1.	0.	10.	14.	1.0.23	468.
26	DESQA3 DISTIL	-0.246	0.049	-0.246	0.327	0.15	-412.	-10.	2.	-324.	134.	9.-0.62	378.
28	DESQA3 DISTIL	-0.744	0.133	-0.744	0.999	0.43	-1387.	-36.	7.	-1114.	415.	27.-0.65	936.
33	DESQA3 DISTIL	-0.137	0.022	-0.137	0.176	0.02	-223.	-9.	1.	-174.	71.	5.-0.65	206.
ALL	DESQA3 DISTIL	-1.891	0.368	-1.891	2.604	0.13	-3448.	-67.	19.	-2743.	1097.	72.-0.64	4667.
20	DESQA3 RESIDU	-0.314	0.076	-0.314	0.485	0.42	-1422.	-72.	1.	-1290.	151.	26.-2.36	1642.
22	DESQA3 RESIDU	-0.024	0.005	-0.024	0.032	0.15	-96.	-6.	0.	-87.	9.	2.-2.52	50.
24	DESQA3 RESIDU	-0.027	0.005	-0.027	0.035	0.03	-2.	-7.	0.	7.	9.	2.0.18	468.
26	DESQA3 RESIDU	-0.246	0.049	-0.246	0.327	0.15	-898.	-63.	1.	-809.	89.	17.-2.35	378.
28	DESQA3 RESIDU	-0.744	0.133	-0.744	0.999	0.43	-3010.	-201.	1.	-2731.	273.	52.-2.41	936.
33	DESQA3 RESIDU	-0.137	0.022	-0.137	0.176	0.02	-483.	-38.	0.	-434.	46.	9.-2.41	206.
ALL	DESQA3 RESIDU	-1.891	0.368	-1.891	2.604	0.13	-7493.	-491.	3.	-6774.	732.	136.-2.38	4667.
20	GTSQAD DISTIL	-0.319	0.143	-0.319	0.507	0.46	-38.	34.	7.	77.	224.	16.0.68	6152.
22	GTSQAD DISTIL	-0.022	0.012	-0.022	0.032	0.19	-0.	4.	1.	6.	14.	1.0.68	251.
24	GTSQAD DISTIL	-0.009	0.005	-0.009	0.013	0.01	0.	1.	0.	3.	6.	0.0.09	497.

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST: = \$*10**9

TYPE MATCH=HEAT

		*****FUEL SAVINGS*****				- - EMISSIONS SAVINGS - - -				CAPITL--ELECTRIC POWER---			
PROCS	ECS	ECS ****DIRECT*****		-----TOTAL-----		FESR -----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST
		FUEL OIL+GAS	COAL OIL+GAS	COAL		NOX	SOX	PART	NOX	SOX	PART	EXPORT	LAEC
												MWH	SAVED
26	GTSOAD DISTIL	-0.225	0.122	-0.225	0.327	0.19	6.	37.	6.	71.	142.	9. 0.71	1989.
28	GTSOAD DISTIL	-1.616	0.858	-1.616	2.349	1.25	-27.	252.	43.	440.	1019.	67. 0.66	13716.
29	GTSOAD DISTIL	-0.154	0.082	-0.154	0.223	0.17	-2.	24.	4.	42.	97.	6. 0.68	1190.
33	GTSOAD DISTIL	-0.068	0.036	-0.068	0.098	0.02	1.	11.	2.	21.	42.	3. 0.35	712.
ALL	GTSOAD DISTIL	-3.530	1.841	-3.530	5.194	0.31	-86.	531.	92.	966.	2259.	149. 0.66	35864.
20	GTRA08 DISTIL	0.	-0.210	0.	0.211	0.51	-100.	-18.	2.	36.	214.	29. 0.53	4735.
22	GTRA08 DISTIL	0.	-0.013	0.	0.011	0.21	-5.	-1.	0.	2.	12.	1. 0.52	226.
24	GTRA08 DISTIL	0.	-0.008	0.	0.006	0.02	-2.	-1.	0.	2.	7.	1. 0.10	428.
26	GTRA08 DISTIL	0.	-0.131	0.	0.111	0.20	-51.	-10.	1.	27.	122.	15. 0.53	1790.
28	GTRA08 DISTIL	0.	-1.317	0.	0.759	1.29	-555.	-201.	-4.	113.	935.	119. 0.48	14142.
29	GTRA08 DISTIL	0.	-0.102	0.	0.069	0.17	-43.	-12.	-0.	12.	81.	10. 0.49	1117.
33	GTRA08 DISTIL	0.	-0.063	0.	0.045	0.03	-25.	-7.	0.	10.	52.	6. 0.37	922.
ALL	GTRA08 DISTIL	0.	-2.678	0.	1.761	0.33	-1135.	-362.	-3.	294.	2069.	265. 0.49	33935.
20	GTRA12 DISTIL	0.	-0.207	0.	0.213	0.52	-99.	-17.	2.	36.	214.	29. 0.53	4874.
22	GTRA12 DISTIL	0.	-0.012	0.	0.011	0.21	-5.	-1.	0.	2.	12.	1. 0.52	222.
24	GTRA12 DISTIL	0.	-0.008	0.	0.006	0.02	-2.	-1.	0.	2.	7.	1. 0.10	448.
26	GTRA12 DISTIL	0.	-0.127	0.	0.113	0.21	-49.	-8.	1.	28.	123.	15. 0.53	1786.
28	GTRA12 DISTIL	0.	-1.208	0.	0.787	1.34	-513.	-160.	-2.	129.	931.	117. 0.49	13683.
29	GTRA12 DISTIL	0.	-0.097	0.	0.072	0.18	-42.	-10.	0.	13.	82.	10. 0.50	1117.
33	GTRA12 DISTIL	0.	-0.059	0.	0.045	0.03	-23.	-6.	0.	10.	51.	6. 0.37	891.
ALL	GTRA12 DISTIL	0.	-2.501	0.	1.816	0.34	-1067.	-294.	2.	322.	2070.	262. 0.49	33531.
20	GTRA16 DISTIL	0.	-0.203	0.	0.209	0.51	-98.	-14.	2.	35.	213.	29. 0.52	4361.
22	GTRA16 DISTIL	0.	-0.012	0.	0.011	0.21	-5.	-0.	0.	2.	12.	1. 0.52	213.
24	GTRA16 DISTIL	0.	-0.007	0.	0.006	0.02	-2.	-0.	0.	2.	7.	1. 0.09	435.
26	GTRA16 DISTIL	0.	-0.124	0.	0.111	0.20	-48.	-6.	1.	28.	123.	15. 0.53	1721.
28	GTRA16 DISTIL	0.	-1.131	0.	0.780	1.33	-485.	-124.	1.	131.	922.	115. 0.49	12904.
29	GTRA16 DISTIL	0.	-0.093	0.	0.072	0.17	-40.	-8.	0.	13.	82.	10. 0.50	1070.
33	GTRA16 DISTIL	0.	-0.054	0.	0.043	0.03	-21.	-4.	0.	10.	49.	6. 0.35	813.
ALL	GTRA16 DISTIL	0.	-2.368	0.	1.797	0.34	-1019.	-228.	8.	322.	2054.	259. 0.49	31363.
20	GTR208 DISTIL	0.	-0.194	0.	0.197	0.48	-96.	-6.	3.	30.	210.	29. 0.51	5118.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

		*****FUEL SAVINGS*****				-----EMISSIONS SAVINGS-----						CAPITL--ELECTRIC POWER---						
PROCS	ECS	ECS ****DIRECT****		-----TOTAL-----		FESR	-----DIRECT-----		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		EXPORT	SAVED			
													MWH					
22	GTR208	DISTIL	0.	-0.011	0.	0.011	0.20	-5.	0.	0.	2.	12.	1.	0.50	231.	2.	45.	-25.
24	GTR208	DISTIL	0.	-0.006	0.	0.005	0.02	-2.	-0.	0.	2.	6.	1.	0.08	458.	0.	-64.	74.
26	GTR208	DISTIL	0.	-0.117	0.	0.105	0.19	-45.	1.	1.	27.	122.	15.	0.52	1857.	13.	489.	-168.
28	GTR208	DISTIL	0.	-1.003	0.	0.735	1.25	-439.	-52.	7.	120.	899.	111.	0.48	13382.	133.	2655.	-2205.
29	GTR208	DISTIL	0.	-0.086	0.	0.068	0.17	-38.	-3.	1.	12.	82.	10.	0.49	1124.	12.	293.	-194.
33	GTR208	DISTIL	0.	-0.044	0.	0.036	0.02	-17.	-1.	0.	9.	43.	5.	0.30	797.	0.	-96.	2.
ALL	GTR208	DISTIL	0.	-2.130	0.	1.685	0.32	-936.	-89.	19.	292.	2002.	250.	0.48	33479.	271.	4845.	-4722.
20	GTR212	DISTIL	0.	-0.200	0.	0.200	0.49	-98.	-10.	3.	31.	211.	29.	0.51	4941.	27.	-79.	-780.
22	GTR212	DISTIL	0.	-0.012	0.	0.011	0.20	-5.	-0.	0.	2.	12.	1.	0.51	226.	2.	43.	-26.
24	GTR212	DISTIL	0.	-0.006	0.	0.005	0.02	-2.	-0.	0.	2.	6.	1.	0.08	452.	0.	-64.	73.
26	GTR212	DISTIL	0.	-0.120	0.	0.107	0.20	-46.	-2.	1.	27.	122.	15.	0.52	1835.	14.	462.	-174.
28	GTR212	DISTIL	0.	-1.027	0.	0.754	1.28	-447.	-70.	6.	126.	904.	112.	0.48	13254.	137.	2635.	-2214.
29	GTR212	DISTIL	0.	-0.088	0.	0.070	0.17	-39.	-4.	1.	12.	82.	10.	0.49	1118.	13.	291.	-194.
33	GTR212	DISTIL	0.	-0.047	0.	0.039	0.02	-19.	-2.	0.	9.	45.	5.	0.32	825.	0.	-78.	4.
ALL	GTR212	DISTIL	0.	-2.190	0.	1.729	0.32	-956.	-129.	16.	306.	2018.	253.	0.48	33057.	281.	4715.	-4832.
20	GTR216	DISTIL	0.	-0.198	0.	0.205	0.50	-97.	-10.	3.	33.	212.	29.	0.52	4724.	28.	-122.	-797.
22	GTR216	DISTIL	0.	-0.012	0.	0.011	0.21	-5.	-0.	0.	2.	12.	1.	0.51	219.	2.	42.	-26.
24	GTR216	DISTIL	0.	-0.006	0.	0.005	0.02	-2.	-0.	0.	2.	6.	1.	0.08	450.	0.	-64.	73.
26	GTR216	DISTIL	0.	-0.119	0.	0.110	0.20	-46.	-2.	1.	28.	123.	15.	0.53	1784.	14.	479.	-172.
28	GTR216	DISTIL	0.	-1.027	0.	0.775	1.32	-446.	-75.	5.	134.	911.	113.	0.49	12878.	139.	2598.	-2210.
29	GTR216	DISTIL	0.	-0.088	0.	0.072	0.17	-38.	-4.	1.	13.	83.	10.	0.50	1088.	13.	269.	-192.
33	GTR216	DISTIL	0.	-0.048	0.	0.040	0.03	-19.	-2.	0.	10.	46.	6.	0.33	815.	0.	-72.	5.
ALL	GTR216	DISTIL	0.	-2.184	0.	1.779	0.33	-952.	-137.	15.	324.	2034.	254.	0.49	32051.	285.	4598.	-4842.
20	GTRW08	DISTIL	0.	-0.257	0.	0.185	0.45	-117.	-36.	0.	26.	207.	29.	0.49	5095.	34.	-338.	-1033.
22	GTRW08	DISTIL	0.	-0.015	0.	0.010	0.18	-6.	-2.	-0.	2.	12.	1.	0.48	235.	2.	35.	-34.
24	GTRW08	DISTIL	0.	-0.011	0.	0.006	0.02	-3.	-1.	-0.	3.	8.	1.	0.11	419.	0.	-69.	59.
26	GTRW08	DISTIL	0.	-0.155	0.	0.097	0.18	-60.	-20.	-0.	21.	118.	15.	0.49	1902.	18.	413.	-270.
28	GTRW08	DISTIL	0.	-1.462	0.	0.663	1.16	-610.	-258.	-9.	80.	916.	119.	0.45	15153.	170.	2221.	-3099.
29	GTRW08	DISTIL	0.	-0.116	0.	0.061	0.15	-49.	-18.	-0.	8.	79.	10.	0.45	1222.	15.	249.	-251.
33	GTRW08	DISTIL	0.	-0.077	0.	0.042	0.03	-30.	-11.	-0.	8.	54.	7.	0.39	1041.	0.	36.	-21.
ALL	GTRW08	DISTIL	0.	-3.046	0.	1.579	0.30	-1275.	-505.	-13.	214.	2028.	265.	0.46	36502.	347.	3708.	-6771.
20	GTRW12	DISTIL	0.	-0.249	0.	0.196	0.48	-113.	-35.	0.	30.	210.	29.	0.51	5167.	34.	-292.	-987.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

PAGE 12

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=HEAT

PROCS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---								
		*****DIRECT*****		TOTAL		FESR		DIRECT		*****TOTAL*****		EMSR	SAVING	TOTAL	COST	LAEC		
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT		SAVED	
															MWH			
22	GTRW12	DISTIL	0.	-0.014	0.	0.010	0.20	-6.	-2.	0.	2.	12.	1.	0.50	236.	2.	38.	-31.
24	GTRW12	DISTIL	0.	-0.010	0.	0.007	0.02	-3.	-1.	-0.	3.	8.	1.	0.11	419.	0.	-66.	62.
26	GTRW12	DISTIL	0.	-0.148	0.	0.105	0.19	-58.	-18.	-0.	24.	120.	15.	0.51	1908.	18.	442.	-238.
28	GTRW12	DISTIL	0.	-1.331	0.	0.755	1.28	-558.	-218.	-6.	113.	923.	118.	0.48	14889.	164.	2569.	-2620.
29	GTRW12	DISTIL	0.	-0.109	0.	0.068	0.16	-46.	-16.	-0.	11.	81.	10.	0.48	1243.	15.	280.	-219.
33	GTRW12	DISTIL	0.	-0.072	0.	0.046	0.03	-28.	-10.	-0.	10.	54.	7.	0.40	1030.	0.	50.	-3.
ALL	GTRW12	DISTIL	0.	-2.826	0.	1.735	0.33	-1188.	-439.	-9.	280.	2059.	265.	0.48	36390.	341.	4415.	-5802.
20	GTRW16	DISTIL	0.	-0.244	0.	0.195	0.48	-112.	-32.	1.	30.	210.	29.	0.50	4730.	33.	-363.	-1018.
22	GTRW16	DISTIL	0.	-0.014	0.	0.010	0.20	-6.	-1.	0.	2.	12.	1.	0.50	228.	2.	37.	-31.
24	GTRW16	DISTIL	0.	-0.009	0.	0.007	0.02	-3.	-1.	0.	2.	8.	1.	0.10	406.	0.	-71.	61.
26	GTRW16	DISTIL	0.	-0.144	0.	0.104	0.19	-56.	-15.	0.	24.	120.	15.	0.51	1894.	17.	446.	-230.
28	GTRW16	DISTIL	0.	-1.240	0.	0.756	1.28	-524.	-178.	-3.	118.	914.	116.	0.48	14066.	156.	2523.	-2514.
29	GTRW16	DISTIL	0.	-0.105	0.	0.068	0.17	-44.	-13.	-0.	11.	81.	10.	0.49	1207.	14.	280.	-215.
33	GTRW16	DISTIL	0.	-0.066	0.	0.044	0.03	-26.	-8.	-0.	9.	52.	6.	0.38	1000.	0.	23.	1.
ALL	GTRW16	DISTIL	0.	-2.665	0.	1.732	0.33	-1128.	-364.	-3.	287.	2044.	261.	0.48	34434.	326.	4207.	-5774.
20	GTR308	DISTIL	0.	-0.243	0.	0.166	0.41	-114.	-24.	2.	18.	201.	29.	0.47	5227.	29.	-202.	-943.
22	GTR308	DISTIL	0.	-0.015	0.	0.009	0.16	-6.	-1.	0.	1.	11.	1.	0.46	235.	2.	34.	-36.
24	GTR308	DISTIL	0.	-0.009	0.	0.004	0.01	-2.	-1.	0.	2.	6.	1.	0.08	460.	0.	-67.	65.
26	GTR308	DISTIL	0.	-0.151	0.	0.084	0.15	-59.	-13.	0.	17.	115.	14.	0.47	1935.	15.	398.	-284.
28	GTR308	DISTIL	0.	-1.375	0.	0.569	0.97	-583.	-189.	-3.	43.	875.	113.	0.42	14638.	152.	1933.	-3288.
29	GTR308	DISTIL	0.	-0.114	0.	0.052	0.13	-48.	-14.	-0.	5.	77.	10.	0.43	1219.	14.	231.	-273.
33	GTR308	DISTIL	0.	-0.067	0.	0.032	0.02	-27.	-8.	0.	6.	47.	6.	0.31	960.	0.	-65.	-38.
ALL	GTR308	DISTIL	0.	-2.851	0.	1.325	0.25	-1213.	-362.	-0.	132.	1926.	252.	0.43	35662.	305.	3269.	-6932.
20	GTR312	DISTIL	0.	-0.235	0.	0.190	0.46	-110.	-26.	1.	27.	208.	29.	0.50	5325.	31.	-171.	-900.
22	GTR312	DISTIL	0.	-0.013	0.	0.010	0.19	-6.	-1.	0.	2.	12.	1.	0.50	236.	2.	41.	-29.
24	GTR312	DISTIL	0.	-0.008	0.	0.006	0.02	-2.	-1.	0.	2.	7.	1.	0.09	439.	0.	-66.	68.
26	GTR312	DISTIL	0.	-0.137	0.	0.103	0.19	-53.	-11.	1.	24.	120.	15.	0.51	1939.	16.	467.	-210.
28	GTR312	DISTIL	0.	-1.091	0.	0.750	1.28	-469.	-109.	2.	124.	898.	112.	0.48	14045.	142.	2749.	-2182.
29	GTR312	DISTIL	0.	-0.097	0.	0.068	0.17	-42.	-9.	0.	12.	81.	10.	0.49	1208.	14.	295.	-200.
33	GTR312	DISTIL	0.	-0.057	0.	0.041	0.03	-22.	-5.	0.	9.	49.	6.	0.35	950.	0.	-24.	5.
ALL	GTR312	DISTIL	0.	-2.401	0.	1.712	0.32	-1032.	-237.	7.	293.	2016.	255.	0.48	35398.	300.	4824.	-5055.
20	GTR316	DISTIL	0.	-0.236	0.	0.188	0.46	-110.	-26.	1.	27.	208.	29.	0.50	4928.	31.	-263.	-952.

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COGENERATION TECHNOLOGY

ALTERNATIVES STUDY

FUEL UNITS =

EMISSION UNITS=

COST = \$*10**9

REPORT 6.1

TIME 1990

FUEL AND EMISSIONS SAVINGS

LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=HEAT

		*****FUEL SAVINGS*****				-----EMISSIONS-----				SAVINGS-----				CAPITL--ELECTRIC POWER---		
PROCS	ECS	ECS	*****DIRECT*****	TOTAL	-----FESR-----	DIRECT	NOX	SOX	PART	NOX	SOX	PART	EMSR	SAVING	TOTAL	COST
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL									EXPORT	LAEC
															MWH	SAVED
22	GTR316	DISTIL	0.	-0.013	0.	0.010	0.19	-6.	-1.	0.	2.	12.	1.	0.49	231.	39.
24	GTR316	DISTIL	0.	-0.008	0.	0.006	0.02	-2.	-1.	0.	2.	7.	1.	0.09	426.	-69.
26	GTR316	DISTIL	0.	-0.137	0.	0.102	0.19	-53.	-10.	1.	24.	120.	15.	0.51	1900.	455.
28	GTR316	DISTIL	0.	-1.086	0.	0.742	1.26	-467.	-105.	3.	121.	895.	112.	0.48	13645.	2642.
29	GTR316	DISTIL	0.	-0.097	0.	0.068	0.17	-42.	-9.	0.	11.	81.	10.	0.49	1183.	268.
33	GTR316	DISTIL	0.	-0.057	0.	0.040	0.03	-22.	-5.	0.	9.	48.	6.	0.34	920.	-35.
ALL	GTR316	DISTIL	0.	-2.394	0.	1.694	0.32	-1029.	-230.	8.	287.	2009.	254.	0.48	34060.	-5250.
20	FCPADS	DISTIL	0.	-0.241	0.	0.173	0.42	-38.	55.	5.	95.	283.	32.	0.85	4084.	-608.
22	FCPADS	DISTIL	0.	-0.019	0.	0.009	0.17	-3.	3.	0.	6.	18.	2.	0.85	141.	-26.
24	FCPADS	DISTIL	0.	-0.019	0.	0.009	0.03	-5.	-4.	-0.	4.	12.	2.	0.17	524.	-52.
26	FCPADS	DISTIL	0.	-0.188	0.	0.091	0.17	-30.	23.	2.	60.	176.	19.	0.83	1084.	-142.
28	FCPADS	DISTIL	0.	-1.518	0.	0.735	1.25	-239.	222.	19.	486.	1455.	153.	0.84	8885.	-1414.
29	FCPADS	DISTIL	0.	-0.128	0.	0.062	0.15	-20.	19.	2.	41.	124.	13.	0.85	735.	-82.
33	FCPADS	DISTIL	0.	-0.098	0.	0.047	0.03	-17.	10.	1.	29.	89.	9.	0.82	690.	-117.
ALL	FCPADS	DISTIL	0.	-3.259	0.	1.662	0.31	-520.	483.	42.	1064.	3177.	337.	0.84	23795.	-3892.
20	FCMCDS	DISTIL	0.	-0.273	0.	0.211	0.52	-251.	52.	-0.	-95.	318.	30.	0.47	3685.	-1163.
22	FCMCDS	DISTIL	0.	-0.015	0.	0.012	0.22	-14.	3.	-0.	-5.	18.	2.	0.47	130.	-12.
24	FCMCDS	DISTIL	0.	-0.013	0.	0.010	0.03	-3.	-2.	-0.	4.	10.	1.	0.15	501.	-46.
26	FCMCDS	DISTIL	0.	-0.152	0.	0.118	0.22	-126.	28.	-0.	-39.	175.	16.	0.49	992.	-6.
28	FCMCDS	DISTIL	0.	-1.192	0.	0.922	1.57	-1079.	262.	-2.	-399.	1418.	124.	0.47	7772.	-362.
29	FCMCDS	DISTIL	0.	-0.104	0.	0.080	0.20	-94.	23.	-0.	-35.	124.	11.	0.47	655.	5.
33	FCMCDS	DISTIL	0.	-0.074	0.	0.057	0.04	-58.	11.	-0.	-16.	82.	8.	0.45	591.	-92.
ALL	FCMCDS	DISTIL	0.	-2.694	0.	2.084	0.39	-2402.	557.	-5.	-864.	3173.	281.	0.47	21181.	-2480.
BEGINNING OF POWER MATCH																
20	STM141	COAL-A	0.	-0.029	0.	0.047	0.12	22.	-25.	-1.	46.	18.	5.	0.33	-1126.	-558.
22	STM141	COAL-A	0.	-0.004	0.	0.006	0.12	6.	-2.	-0.	9.	3.	0.	0.33	43.	10.
24	STM141	COAL-A	0.	-0.002	0.	0.204	0.67	-0.	-1.	-0.	66.	111.	12.	0.99	-4464.	-1470.
26	STM141	COAL-A	0.	-0.012	0.	0.020	0.04	9.	-7.	-1.	19.	10.	1.	0.39	255.	102.
28	STM141	COAL-A	0.	-0.021	0.	0.035	0.06	49.	-13.	-1.	68.	18.	2.	0.30	361.	145.
29	STM141	COAL-A	0.	-0.021	0.	0.035	0.08	30.	-13.	-1.	48.	18.	2.	0.33	510.	198.
ALL	STM141	COAL-A	0.	-0.134	0.	0.523	0.10	174.	-91.	-7.	385.	270.	34.	0.34	-6622.	-2368.
20	STM141	COAL-F	0.	-0.029	0.	0.047	0.12	-19.	-25.	-1.	6.	18.	5.	0.15	-1709.	-733.

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ALTERNATIVES STUDY

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---			
		ECS *****DIRECT*****				-----TOTAL-----FESR-----DIRECT-----*****TOTAL*****				EMSR SAVING TOTAL COST LAEC			
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT MWH
22	STM141	COAL-F	0.	-0.004	0.	0.006	0.12	-1.	-2.	-0.	2.	3.	0.
24	STM141	COAL-F	0.	-0.002	0.	0.204	0.67	-1.	-1.	-0.	65.	111.	12.
26	STM141	COAL-F	0.	-0.012	0.	0.020	0.04	-4.	-7.	-1.	6.	10.	1.
28	STM141	COAL-F	0.	-0.021	0.	0.035	0.06	-10.	-13.	-1.	8.	18.	2.
29	STM141	COAL-F	0.	-0.021	0.	0.035	0.08	-7.	-13.	-1.	11.	18.	2.
ALL	STM141	COAL-F	0.	-0.134	0.	0.523	0.10	-64.	-91.	-7.	147.	270.	34.
20	STM141	RESIDU	0.	-0.029	0.	0.047	0.12	-19.	13.	-1.	4.	50.	-3.
22	STM141	RESIDU	0.	-0.004	0.	0.006	0.12	-1.	4.	-0.	2.	9.	-1.
24	STM141	RESIDU	0.	-0.002	0.	0.204	0.67	-1.	-1.	-0.	65.	112.	12.
26	STM141	RESIDU	0.	-0.012	0.	0.020	0.04	-4.	5.	-1.	6.	21.	-1.
28	STM141	RESIDU	0.	-0.021	0.	0.035	0.06	-10.	42.	-1.	6.	55.	-9.
29	STM141	RESIDU	0.	-0.021	0.	0.035	0.08	-7.	23.	-1.	9.	48.	-5.
ALL	STM141	RESIDU	0.	-0.134	0.	0.523	0.10	-64.	130.	-7.	139.	458.	-10.
20	STM088	COAL-A	0.	-0.009	0.	0.015	0.04	27.	-5.	-0.	34.	7.	1.
22	STM088	COAL-A	0.	-0.004	0.	0.006	0.12	6.	-2.	-0.	9.	3.	0.
28	STM088	COAL-A	0.	-0.012	0.	0.020	0.03	31.	-7.	-1.	41.	11.	1.
ALL	STM088	COAL-A	0.	-0.048	0.	0.080	0.01	122.	-29.	-2.	160.	41.	5.
20	STM088	COAL-F	0.	-0.009	0.	0.015	0.04	-3.	-5.	-0.	4.	7.	1.
22	STM088	COAL-F	0.	-0.004	0.	0.006	0.12	-1.	-2.	-0.	2.	3.	0.
28	STM088	COAL-F	0.	-0.012	0.	0.020	0.03	-9.	-7.	-1.	2.	11.	1.
ALL	STM088	COAL-F	0.	-0.048	0.	0.080	0.01	-26.	-29.	-2.	15.	41.	5.
20	STM088	RESIDU	0.	-0.009	0.	0.015	0.04	-3.	22.	-0.	3.	31.	-5.
22	STM088	RESIDU	0.	-0.004	0.	0.006	0.12	-1.	4.	-0.	2.	9.	-1.
28	STM088	RESIDU	0.	-0.012	0.	0.020	0.03	-9.	30.	-1.	0.	42.	-6.
ALL	STM088	RESIDU	0.	-0.048	0.	0.080	0.01	-26.	108.	-2.	10.	158.	-22.
20	PFBSTM	COAL-P	0.	-0.036	0.	0.058	0.14	30.	-32.	2.	61.	21.	10.

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FUEL UNITS = REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
EMISSION UNITS= TIME 1990 LEVEL ALL
COST = \$*10**9 TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVING S*****				- - - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---								
		ECS *****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	EXPORT	SAVED					
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART				MWH				
22	PFBSTM	COAL-P	0.	-0.004	0.	0.006	0.12	6.	-2.	0.	10.	3.	1.	0.37	-53.	0.	-15.	-6.
24	PFBSTM	COAL-P	0.	-0.005	0.	0.200	0.66	-1.	-3.	-0.	65.	109.	12.	0.98	-10008.	0.	-2941.	-1756.
26	PFBSTM	COAL-P	0.	-0.044	0.	0.068	0.12	33.	-26.	1.	69.	35.	8.	0.44	479.	0.	232.	188.
28	PFBSTM	COAL-P	0.	-0.068	0.	0.101	0.17	201.	-41.	8.	256.	52.	17.	0.34	502.	0.	223.	184.
29	PFBSTM	COAL-P	0.	-0.022	0.	0.034	0.08	36.	-13.	2.	54.	17.	6.	0.37	295.	0.	132.	103.
ALL	PFBSTM	COAL-P	0.	-0.243	0.	0.638	0.12	419.	-160.	18.	703.	324.	73.	0.39	-17679.	0.	-5297.	-2929.
20	TISTMT	COAL	0.	-0.036	0.	0.058	0.14	-22.	-32.	-2.	9.	21.	6.	0.14	-11395.	0.	-3273.	-1864.
22	TISTMT	COAL	0.	-0.004	0.	0.006	0.12	-1.	-2.	-0.	2.	3.	0.	0.14	-401.	0.	-95.	-51.
24	TISTMT	COAL	0.	-0.004	0.	0.201	0.66	-1.	-2.	-0.	65.	110.	12.	0.98	-22681.	0.	-5961.	-3485.
26	TISTMT	COAL	0.	-0.043	0.	0.069	0.13	-15.	-26.	-2.	21.	35.	4.	0.24	-1635.	0.	-236.	-65.
28	TISTMT	COAL	0.	-0.022	0.	0.035	0.06	-10.	-13.	-1.	8.	18.	2.	0.11	-1262.	0.	-239.	-106.
29	TISTMT	COAL	0.	-0.022	0.	0.034	0.08	-8.	-13.	-1.	10.	17.	2.	0.15	-688.	0.	-81.	-10.
ALL	TISTMT	COAL	0.	-0.190	0.	0.583	0.11	-83.	-129.	-9.	166.	296.	39.	0.17	-55180.	0.	-14332.	-8121.
20	TISTMT	RESIDU	0.	-0.036	0.	0.058	0.14	-22.	10.	-2.	7.	57.	-3.	0.25	-6364.	0.	-1906.	-1306.
22	TISTMT	RESIDU	0.	-0.004	0.	0.006	0.12	-1.	4.	-0.	2.	9.	-1.	0.25	-117.	0.	-24.	-53.
26	TISTMT	RESIDU	0.	-0.043	0.	0.069	0.13	-15.	14.	-2.	19.	69.	-3.	0.33	-557.	0.	-5.	-185.
28	TISTMT	RESIDU	0.	-0.022	0.	0.035	0.06	-10.	42.	-1.	6.	65.	-9.	0.22	-43.	0.	61.	-322.
29	TISTMT	RESIDU	0.	-0.022	0.	0.034	0.08	-8.	22.	-1.	9.	47.	-5.	0.25	-80.	0.	53.	-178.
ALL	TISTMT	RESIDU	0.	-0.192	0.	0.304	0.06	-85.	140.	-10.	65.	373.	-31.	0.26	-10842.	0.	-2757.	-3096.
20	TIHRSG	COAL	0.	-0.011	0.	0.013	0.03	-4.	-6.	-1.	4.	6.	1.	0.07	-3653.	0.	-974.	-559.
22	TIHRSG	COAL	0.	-0.005	0.	0.005	0.09	-2.	-3.	-0.	1.	2.	0.	0.11	-640.	0.	-152.	-83.
24	TIHRSG	COAL	0.	-0.039	0.	0.166	0.55	-13.	-23.	-2.	52.	89.	10.	0.78	-29733.	0.	-7467.	-4281.
26	TIHRSG	COAL	0.	-0.031	0.	0.026	0.05	-11.	-19.	-2.	7.	12.	2.	0.15	-1603.	0.	-317.	-153.
28	TIHRSG	COAL	0.	-0.268	0.	0.088	0.15	-100.	-161.	-13.	14.	34.	8.	0.02	-16332.	0.	-3775.	-2107.
29	TIHRSG	COAL	0.	-0.036	0.	0.019	0.05	-13.	-22.	-2.	5.	3.	1.	0.08	-1282.	0.	-248.	-120.
ALL	TIHRSG	COAL	0.	-0.530	0.	0.430	0.08	-194.	-318.	-27.	115.	207.	30.	0.10	-72463.	0.	-17602.	-9940.
20	TIHRSG	RESIDU	0.	-0.011	0.	0.013	0.03	-4.	22.	-1.	3.	30.	-5.	0.19	-866.	0.	-267.	-321.
22	TIHRSG	RESIDU	0.	-0.005	0.	0.005	0.09	-2.	4.	-0.	1.	8.	-1.	0.22	-331.	0.	-77.	-82.
26	TIHRSG	RESIDU	0.	-0.046	0.	0.018	0.03	-16.	2.	-2.	3.	32.	-4.	0.21	-976.	0.	-222.	-278.
28	TIHRSG	RESIDU	0.	-0.074	0.	0.024	0.04	-28.	49.	-4.	1.	89.	-17.	0.16	-1890.	0.	-440.	-840.

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PAGE 16

FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS =

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVINGS*****				*****EMISSIONS SAVINGS*****				CAPITL--ELECTRIC POWER---								
		*****DIRECT*****		-----TOTAL-----		-----FESR-----		-----DIRECT-----		*****TOTAL*****		EMSR SAVING	TOTAL COST	LAEC SAVED				
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX				PART			
29	TIHRSG	RESIDU	0.	-0.036	0.	0.019	0.05	-13.	16.	-2.	4.	41.	-6.	0.19	-593.	0.	-114.	-294.
ALL	TIHRSG	RESIDU	0.	-0.299	0.	0.136	0.03	-108.	159.	-15.	20.	346.	-57.	0.18	-8068.	0.	-1940.	-3146.
20	STIRL	COAL	0.	-0.045	0.	0.046	0.11	-25.	-38.	-2.	5.	14.	5.	0.10	-2715.	0.	-1172.	-653.
22	STIRL	COAL	0.	-0.006	0.	0.005	0.08	-2.	-3.	-0.	1.	2.	0.	0.10	-35.	0.	-11.	-3.
24	STIRL	COAL	0.	-0.069	0.	0.188	0.62	-25.	-41.	-3.	58.	99.	12.	0.59	-7258.	0.	-2238.	-1292.
26	STIRL	COAL	0.	-0.062	0.	0.050	0.09	-22.	-37.	-3.	14.	24.	4.	0.16	-102.	0.	87.	106.
28	STIRL	COAL	0.	-0.034	0.	0.024	0.04	-14.	-20.	-2.	4.	12.	2.	0.06	-318.	0.	-34.	7.
29	STIRL	COAL	0.	-0.032	0.	0.023	0.06	-11.	-19.	-2.	7.	11.	2.	0.10	-157.	0.	23.	41.
ALL	STIRL	COAL	0.	-0.357	0.	0.483	0.09	-142.	-229.	-18.	128.	233.	35.	0.12	-15219.	0.	-4809.	-2580.
20	STIRL	DISTIL	0.	-0.045	0.	0.046	0.11	1.	32.	5.	31.	84.	12.	0.52	1583.	0.	-47.	-395.
22	STIRL	DISTIL	0.	-0.006	0.	0.005	0.08	2.	7.	1.	5.	13.	1.	0.52	206.	0.	43.	-42.
26	STIRL	DISTIL	0.	-0.062	0.	0.050	0.09	4.	32.	4.	40.	93.	11.	0.56	991.	0.	252.	-221.
28	STIRL	DISTIL	0.	-0.034	0.	0.024	0.04	21.	73.	8.	40.	105.	11.	0.51	901.	0.	227.	-477.
29	STIRL	DISTIL	0.	-0.032	0.	0.023	0.06	11.	40.	5.	29.	71.	8.	0.52	497.	0.	130.	-291.
ALL	STIRL	DISTIL	0.	-0.269	0.	0.222	0.04	60.	278.	34.	218.	549.	66.	0.53	6285.	0.	912.	-2145.
20	STIRL	RESIDU	0.	-0.045	0.	0.046	0.11	-25.	6.	-5.	3.	51.	-6.	0.20	1581.	0.	-14.	-215.
22	STIRL	RESIDU	0.	-0.006	0.	0.005	0.08	-2.	3.	-1.	1.	8.	-1.	0.20	206.	0.	47.	-14.
26	STIRL	RESIDU	0.	-0.062	0.	0.050	0.09	-22.	6.	-5.	13.	61.	-7.	0.26	990.	0.	298.	-43.
28	STIRL	RESIDU	0.	-0.034	0.	0.024	0.04	-14.	39.	-4.	2.	61.	-12.	0.17	900.	0.	252.	-236.
29	STIRL	RESIDU	0.	-0.032	0.	0.023	0.06	-11.	18.	-4.	5.	43.	-8.	0.20	496.	0.	154.	-138.
ALL	STIRL	RESIDU	0.	-0.269	0.	0.222	0.04	-112.	108.	-27.	36.	337.	-52.	0.21	6277.	0.	1109.	-973.
20	HEGT85	COAL-A	0.	-0.049	0.	0.038	0.09	17.	-39.	-2.	45.	10.	5.	0.25	-8761.	0.	-2487.	-1386.
22	HEGT85	COAL-A	0.	-0.008	0.	0.002	0.04	5.	-5.	-0.	8.	1.	0.	0.23	-278.	0.	-71.	-40.
24	HEGT85	COAL-A	0.	-0.045	0.	0.051	0.17	-6.	-27.	-2.	25.	26.	3.	0.60	-11461.	0.	-3121.	-1862.
26	HEGT85	COAL-A	0.	-0.118	0.	0.020	0.04	19.	-71.	-6.	64.	4.	2.	0.23	-1206.	0.	-223.	-108.
28	HEGT85	COAL-A	0.	-0.047	0.	0.011	0.02	-2.	-29.	-2.	17.	3.	1.	0.25	-469.	0.	-79.	-31.
33	HEGT85	COAL-A	0.	-0.042	0.	0.007	0.00	-8.	-25.	-2.	8.	2.	1.	0.17	-828.	0.	-186.	-99.
ALL	HEGT85	COAL-A	0.	-0.414	0.	0.172	0.03	33.	-262.	-21.	222.	61.	17.	0.24	-30814.	0.	-8261.	-4724.
20	HEGT60	COAL-A	0.	-0.064	0.	0.030	0.07	15.	-49.	-3.	46.	4.	4.	0.24	-9185.	0.	-2645.	-1487.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				- - EMISSIONS SAVINGS - - -				CAPITL--ELECTRIC POWER--								
		ECS	*****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	SAVED					
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH				
22	HEGT60	COAL-A	0.	-0.008	0.	0.002	0.04	4.	-5.	-0.	8.	1.	0.	0.23	-258.	0.	-66.	-36.
24	HEGT60	COAL-A	0.	-0.139	0.	0.116	0.38	-20.	-83.	-7.	62.	56.	8.	0.49	-18415.	0.	-4639.	-2820.
26	HEGT60	COAL-A	0.	-0.112	0.	0.026	0.05	19.	-67.	-6.	63.	8.	3.	0.24	-1032.	0.	-171.	-72.
28	HEGT60	COAL-A	0.	-0.042	0.	0.010	0.02	30.	-26.	-2.	46.	2.	1.	0.20	-1240.	0.	-285.	-151.
29	HEGT60	COAL-A	0.	-0.055	0.	0.001	0.00	23.	-33.	-3.	41.	-2.	1.	0.19	-310.	0.	-57.	-32.
33	HEGT60	COAL-A	0	-0.063	0.	0.004	0.00	-9.	-38.	-3.	12.	-1.	1.	0.16	-14.	0.	-15.	-3.
ALL	HEGT60	COAL-A	0.	-0.661	0.	0.258	0.05	85.	-413.	-33.	381.	92.	25.	0.22	-41787.	0.	-11083.	-6314.
20	HEGT00	COAL-A	0.	-0.054	0.	0.022	0.05	12.	-40.	-3.	37.	3.	3.	0.22	-5178.	0.	-1509.	-821.
22	HEGT00	COAL-A	0.	-0.008	0.	0.002	0.05	4.	-5.	-0.	7.	1.	0.	0.23	-227.	0.	-58.	-32.
24	HEGT00	COAL-A	0.	-0.084	0.	0.121	0.40	-11.	-50.	-4.	54.	61.	8.	0.65	-15655.	0.	-4161.	-2418.
26	HEGT00	COAL-A	0.	-0.087	0.	0.025	0.05	15.	-52.	-4.	51.	9.	2.	0.24	-564.	0.	-67.	-14.
28	HEGT00	COAL-A	0.	-0.417	0.	0.077	0.13	317.	-250.	-21.	476.	20.	8.	0.26	-7479.	0.	-1700.	-941.
29	HEGT00	COAL-A	0.	-0.046	0.	0.010	0.02	22.	-27.	-2.	40.	3.	1.	0.21	-155.	0.	-4.	8.
ALL	HEGT00	COAL-A	0.	-0.894	0.	0.331	0.06	463.	-546.	-45.	857.	125.	30.	0.24	-37641.	0.	-9634.	-5426.
20	FCMCCL	COAL	0.	-0.033	0.	0.030	0.09	7.	16.	2.	30.	56.	8.	0.46	-5788.	0.	-1729.	-990.
22	FCMCCL	COAL	0.	-0.005	0.	0.005	0.10	2.	4.	0.	5.	9.	1.	0.40	-209.	0.	-50.	-27.
26	FCMCCL	COAL	0.	-0.034	0.	0.039	0.07	15.	26.	2.	39.	66.	6.	0.75	-492.	0.	-42.	5.
28	FCMCCL	COAL	0.	-0.022	0.	0.025	0.04	9.	16.	1.	24.	42.	4.	0.32	-690.	0.	-131.	-64.
29	FCMCCL	COAL	0.	-0.026	0.	0.029	0.07	11.	19.	1.	29.	50.	5.	0.41	-181.	0.	19.	33.
ALL	FCMCCL	COAL	0.	-0.194	0.	0.222	0.04	71.	132.	11.	206.	361.	39.	0.45	-11936.	0.	-3134.	-1691.
20	FCSTCL	COAL	0.	-0.031	0.	0.039	0.10	1.	5.	1.	23.	45.	7.	0.38	-5572.	0.	-1742.	-1024.
22	FCSTCL	COAL	0.	-0.004	0.	0.006	0.10	1.	2.	0.	5.	8.	1.	0.35	-191.	0.	-47.	-25.
26	FCSTCL	COAL	0.	-0.033	0.	0.041	0.07	10.	18.	1.	34.	58.	6.	0.66	-463.	0.	-34.	11.
28	FCSTCL	COAL	0.	-0.023	0.	0.028	0.05	5.	13.	1.	22.	41.	4.	0.35	-501.	0.	-77.	-26.
29	FCSTCL	COAL	0.	-0.025	0.	0.031	0.07	8.	14.	1.	26.	44.	4.	0.37	-156.	0.	29.	40.
33	FCSTCL	COAL	0.	-0.013	0.	0.017	0.01	1.	7.	1.	11.	24.	2.	0.98	-219.	0.	-26.	-2.
ALL	FCSTCL	COAL	0.	-0.204	0.	0.253	0.05	42.	93.	8.	190.	345.	38.	0.44	-11150.	0.	-2977.	-1610.
20	IGGTST	COAL	0.	-0.038	0.	0.032	0.08	-21.	-32.	1.	2.	8.	7.	0.11	-6010.	0.	-1903.	-1143.
22	IGGTST	COAL	0.	-0.006	0.	0.004	0.08	-2.	-3.	0.	1.	2.	1.	0.11	-192.	0.	-49.	-27.
26	IGGTST	COAL	0.	-0.042	0.	0.032	0.06	-15.	-25.	2.	9.	15.	6.	0.21	-409.	0.	-22.	16.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9
REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING*****				-----EMISSIONS SAVING-----						CAPITL--ELECTRIC POWER---			
		*****DIRECT*****	TOTAL	FESR	DIRECT	NOX	SOX	PART	NOX	SOX	PART	EMSR SAVING	TOTAL EXPORT	COST	LAEC SAVED
		FUEL OIL+GAS	COAL OIL+GAS	COAL									MWH		
28	IGGTST COAL	0.	-0.025	0.	0.018	0.03	-11.	-15.	1.	3.	8.	4. 0.09	-359.	0.	-53.
29	IGGTST COAL	0.	-0.032	0.	0.024	0.06	-11.	-19.	1.	7.	11.	5. 0.11	-90.	0.	44.
ALL	IGGTST COAL	0.	-0.232	0.	0.181	0.03	-97.	-154.	9.	37.	74.	37. 0.12	-11512.	0.	-3232.
20	GTSOAR RESIDU	-0.172	0.124	-0.172	0.218	0.11	2.	10.	5.	32.	81.	10. 0.51	878.	0.	-161.
22	GTSOAR RESIDU	-0.034	0.028	-0.034	0.038	0.09	5.	4.	1.	8.	10.	2. 0.52	212.	0.	50.
26	GTSOAR RESIDU	-0.255	0.178	-0.255	0.316	0.11	23.	11.	7.	68.	87.	15. 0.55	1527.	0.	443.
28	GTSOAR RESIDU	-0.355	0.306	-0.355	0.382	0.05	55.	50.	12.	80.	92.	17. 0.50	1439.	0.	373.
29	GTSOAR RESIDU	-0.188	0.155	-0.188	0.210	0.05	25.	22.	6.	43.	52.	10. 0.51	649.	0.	188.
ALL	GTSOAR RESIDU	-1.463	1.154	-1.463	1.700	0.04	161.	142.	46.	336.	440.	78. 0.52	6864.	0.	1302.
20	GTAC08 RESIDU	0.	-0.045	0.	0.049	0.12	-50.	7.	-5.	-21.	53.	-6. 0.12	1428.	0.	-14.
22	GTAC08 RESIDU	0.	-0.005	0.	0.005	0.10	-5.	4.	-1.	-2.	8.	-1. 0.14	229.	0.	56.
26	GTAC08 RESIDU	0.	-0.052	0.	0.060	0.11	-35.	10.	-4.	-0.	65.	-6. 0.22	1366.	0.	422.
28	GTAC08 RESIDU	0.	-0.032	0.	0.036	0.08	-32.	42.	-4.	-12.	70.	-12. 0.14	1374.	0.	392.
29	GTAC08 RESIDU	0.	-0.026	0.	0.030	0.07	-26.	21.	-3.	-9.	46.	-7. 0.14	729.	0.	231.
ALL	GTAC08 RESIDU	0.	-0.238	0.	0.269	0.05	-220.	124.	-25.	-67.	361.	-48. 0.16	7651.	0.	1623.
20	GTAC12 RESIDU	0.	-0.044	0.	0.050	0.12	-47.	7.	-5.	-18.	54.	-6. 0.14	1396.	0.	-23.
22	GTAC12 RESIDU	0.	-0.005	0.	0.005	0.10	-4.	4.	-1.	-1.	8.	-1. 0.15	228.	0.	56.
26	GTAC12 RESIDU	0.	-0.066	0.	0.072	0.13	-41.	9.	-5.	2.	77.	-7. 0.22	1589.	0.	493.
28	GTAC12 RESIDU	0.	-0.032	0.	0.036	0.06	-30.	41.	-3.	-10.	70.	-12. 0.14	1357.	0.	387.
29	GTAC12 RESIDU	0.	-0.027	0.	0.029	0.07	-24.	20.	-3.	-7.	45.	-7. 0.15	686.	0.	218.
ALL	GTAC12 RESIDU	0.	-0.253	0.	0.281	0.05	-213.	120.	-24.	-52.	372.	-47. 0.17	7690.	0.	1656.
20	GTAC16 RESIDU	0.	-0.044	0.	0.050	0.12	-46.	7.	-4.	-17.	54.	-6. 0.14	1266.	0.	-55.
22	GTAC16 RESIDU	0.	-0.005	0.	0.005	0.10	-4.	4.	-1.	-1.	8.	-1. 0.15	224.	0.	55.
24	GTAC16 RESIDU	0.	-0.250	0.	0.005	0.02	-97.	-99.	-13.	-17.	32.	-8. -0.08	1714.	0.	-295.
26	GTAC16 RESIDU	0.	-0.067	0.	0.071	0.13	-39.	9.	-5.	3.	77.	-7. 0.23	1543.	0.	477.
28	GTAC16 RESIDU	0.	-0.044	0.	0.044	0.07	-38.	49.	-4.	-13.	86.	-14. 0.14	1664.	0.	469.
29	GTAC16 RESIDU	0.	-0.028	0.	0.028	0.07	-23.	20.	-3.	-7.	45.	-7. 0.15	663.	0.	209.
ALL	GTAC16 RESIDU	0.	-0.627	0.	0.290	0.05	-355.	-15.	-44.	-74.	432.	-62. 0.17	10136.	0.	1231.
20	GTWC16 RESIDU	0.	-0.050	0.	0.044	0.11	-48.	5.	-5.	-20.	51.	-6. 0.12	962.	0.	-152.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	ECS	*****FUEL SAVING S*****				- - EMISSIONS SAVING S - - -				CAPITL--ELECTRIC POWER---						
			*****DIRECT*****	TOTAL	FESR	DIRECT	*****TOTAL*****	EMSR	SAVING	TOTAL	COST	LAEC	SAVED				
			FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH				
22	GTWC16	RESIDU	0.	-0.005	0.	0.005	0.09	-4.	4.	-1.	-1.	8.	-1. 0.14	216.	0.	51.	-11.
24	GTWC16	RESIDU	0.	-0.050	0.	0.001	3.00	-27.	-20.	-3.	-11.	7.	-2. -0.12	374.	0.	41.	-9.
26	GTWC16	RESIDU	0.	-0.073	0.	0.064	0.12	-43.	6.	-5.	-0.	74.	-7. 0.21	1552.	0.	459.	22.
28	GTWC16	RESIDU	0.	-0.045	0.	0.040	0.07	-38.	47.	-4.	-14.	82.	-14. 0.13	1568.	0.	435.	-216.
29	GTWC16	RESIDU	0.	-0.030	0.	0.026	0.06	-24.	19.	-3.	-8.	44.	-7. 0.14	673.	0.	206.	-103.
ALL	GTWC16	RESIDU	0.	-0.364	0.	0.259	0.05	-266.	88.	-31.	-77.	383.	-56. 0.16	7687.	0.	1496.	-873.
20	CC1626	RESIDU	0.	-0.049	0.	0.044	0.11	-43.	5.	-4.	-15.	51.	-6. 0.14	792.	0.	-277.	-412.
22	CC1626	RESIDU	0.	-0.005	0.	0.005	0.09	-4.	4.	-0.	-1.	8.	-1. 0.15	214.	0.	49.	-14.
24	CC1626	RESIDU	0.	-0.217	0.	0.035	0.12	-82.	-86.	-11.	-2.	45.	-5. 0.11	1067.	0.	-495.	-517.
26	CC1626	RESIDU	0.	-0.074	0.	0.064	0.12	-37.	6.	-5.	6.	74.	-7. 0.23	1499.	0.	438.	3.
28	CC1626	RESIDU	0.	-0.033	0.	0.028	0.05	-27.	32.	-3.	-9.	57.	-10. 0.14	973.	0.	269.	-174.
29	CC1626	RESIDU	0.	-0.030	0.	0.025	0.06	-23.	19.	-3.	-6.	44.	-7. 0.15	670.	0.	201.	-110.
33	CC1626	RESIDU	0.	-0.073	0.	0.028	0.02	-49.	-25.	-6.	-17.	27.	-4. 0.08	956.	0.	167.	50.
ALL	CC1626	RESIDU	0.	-0.691	0.	0.328	0.06	-379.	-67.	-47.	-64.	438.	-56. 0.14	8848.	0.	505.	-1682.
20	CC1622	RESIDU	0.	-0.047	0.	0.046	0.11	-43.	6.	-4.	-14.	52.	-6. 0.15	1034.	0.	-212.	-371.
22	CC1622	RESIDU	0.	-0.005	0.	0.005	0.09	-4.	4.	-0.	-1.	8.	-1. 0.16	221.	0.	51.	-12.
24	CC1622	RESIDU	0.	-0.220	0.	0.032	0.10	-83.	-87.	-12.	-4.	43.	-6. 0.08	1459.	0.	-410.	-474.
26	CC1622	RESIDU	0.	-0.071	0.	0.067	0.12	-36.	7.	-5.	6.	75.	-7. 0.23	1493.	0.	448.	15.
28	CC1622	RESIDU	0.	-0.032	0.	0.029	0.05	-27.	32.	-3.	-9.	58.	-10. 0.14	982.	0.	276.	-168.
29	CC1622	RESIDU	0.	-0.029	0.	0.027	0.07	-22.	19.	-3.	-6.	44.	-7. 0.15	664.	0.	204.	-106.
33	CC1622	RESIDU	0.	-0.025	0.	0.023	0.01	-23.	-6.	-2.	-8.	19.	-1. 0.16	336.	0.	97.	35.
ALL	CC1622	RESIDU	0.	-0.617	0.	0.329	0.06	-344.	-37.	-42.	-52.	431.	-53. 0.17	8918.	0.	653.	-1555.
20	CC1222	RESIDU	0.	-0.047	0.	0.047	0.11	-43.	6.	-4.	-14.	52.	-5. 0.15	1148.	0.	-184.	-354.
22	CC1222	RESIDU	0.	-0.005	0.	0.005	0.09	-4.	4.	-0.	-1.	8.	-1. 0.16	226.	0.	52.	-11.
24	CC1222	RESIDU	0.	-0.219	0.	0.032	0.11	-83.	-87.	-12.	-4.	44.	-6. 0.09	1688.	0.	-354.	-442.
26	CC1222	RESIDU	0.	-0.070	0.	0.067	0.12	-36.	8.	-5.	7.	75.	-6. 0.24	1532.	0.	458.	21.
28	CC1222	RESIDU	0.	-0.031	0.	0.029	0.05	-26.	32.	-3.	-9.	58.	-10. 0.14	1000.	0.	281.	-164.
29	CC1222	RESIDU	0.	-0.029	0.	0.027	0.07	-22.	19.	-3.	-6.	44.	-7. 0.15	676.	0.	207.	-103.
33	CC1222	RESIDU	0.	-0.025	0.	0.024	0.01	-23.	-6.	-2.	-8.	19.	-1. 0.16	352.	0.	101.	38.
ALL	CC1222	RESIDU	0.	-0.614	0.	0.332	0.06	-342.	-35.	-42.	-50.	432.	-52. 0.17	9534.	0.	809.	-1461.
20	CC0822	RESIDU	0.	-0.044	0.	0.050	0.12	-42.	7.	-4.	-14.	53.	-5. 0.15	988.	0.	-210.	-362.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

PROCS		ECS		*****FUEL SAVINGS*****				- - EMISSIONS SAVINGS - -				CAPITL--ELECTRIC POWER---			
				ECS *****DIRECT*****		-----TOTAL-----		FESR -----DIRECT-----		*****TOTAL*****		EMSR SAVING		TOTAL COST LAEC	
				FUEL OIL+GAS		COAL OIL+GAS		NOX SOX		PART NOX SOX		EXPORT MWH		SAVED	
22	CC0822	RESIDU	0.	-0.005	0.	0.005	0.10	-4.	4.	-0.	-1.	8.	-1.	0.16	221.
24	CC0822	RESIDU	0.	-0.226	0.	0.016	0.05	-88.	-90.	-12.	-11.	35.	-7.	-0.02	1327.
26	CC0822	RESIDU	0.	-0.066	0.	0.072	0.13	-36.	9.	-5.	6.	77.	-6.	0.24	1579.
28	CC0822	RESIDU	0.	-0.029	0.	0.031	0.05	-27.	33.	-3.	-9.	58.	-9.	0.15	996.
29	CC0822	RESIDU	0.	-0.027	0.	0.029	0.07	-23.	20.	-3.	-6.	45.	-7.	0.16	684.
ALL	CC0822	RESIDU	0.	-0.582	0.	0.299	0.06	-322.	-24.	-40.	-51.	409.	-53.	0.18	8517.
20	STIG15	RESIDU	0.	-0.077	0.	0.016	0.04	-54.	-6.	-2.	-26.	39.	-5.	0.07	487.
22	STIG15	RESIDU	0.	-0.008	0.	0.002	0.03	-5.	2.	-0.	-2.	7.	-1.	0.09	216.
24	STIG15	RESIDU	0.	-0.215	0.	0.042	0.14	-77.	-86.	-11.	4.	48.	-4.	0.20	937.
26	STIG15	RESIDU	0.	-0.114	0.	0.024	0.04	-51.	-10.	-5.	-9.	57.	-8.	0.11	1410.
28	STIG15	RESIDU	0.	-0.104	0.	0.022	0.04	-65.	-20.	-3.	-26.	42.	-4.	0.03	994.
33	STIG15	RESIDU	0.	-0.040	0.	0.006	0.01	-28.	-12.	-1.	-13.	13.	-1.	-0.02	287.
ALL	STIG15	RESIDU	0.	-0.719	0.	0.146	0.03	-360.	-169.	-29.	-92.	265.	-30.	0.06	5570.
20	STIG10	RESIDU	0.	-0.070	0.	0.023	0.06	-53.	-3.	-2.	-24.	42.	-4.	0.08	902.
22	STIG10	RESIDU	0.	-0.008	0.	0.002	0.05	-5.	3.	-0.	-2.	7.	-1.	0.11	223.
24	STIG10	RESIDU	0.	-0.226	0.	0.030	0.10	-83.	-90.	-11.	-2.	43.	-5.	0.14	1311.
26	STIG10	RESIDU	0.	-0.104	0.	0.034	0.06	-49.	-6.	-4.	-7.	61.	-7.	0.14	1531.
28	STIG10	RESIDU	0.	-0.062	0.	0.020	0.03	-42.	-8.	-2.	-16.	33.	-3.	0.07	741.
33	STIG10	RESIDU	0.	-0.037	0.	0.012	0.01	-28.	-11.	-1.	-12.	14.	-0.	0.02	318.
ALL	STIG10	RESIDU	0.	-0.658	0.	0.159	0.03	-336.	-149.	-26.	-82.	261.	-27.	0.10	6530.
20	STIG1S	RESIDU	0.	-0.067	0.	0.026	0.06	-53.	-2.	-2.	-24.	43.	-4.	0.09	1019.
22	STIG1S	RESIDU	0.	-0.007	0.	0.003	0.05	-5.	3.	-0.	-2.	7.	-1.	0.11	226.
24	STIG1S	RESIDU	0.	-0.242	0.	0.014	0.05	-90.	-96.	-12.	-10.	36.	-6.	0.05	1447.
26	STIG1S	RESIDU	0.	-0.099	0.	0.039	0.07	-49.	-4.	-4.	-7.	63.	-7.	0.15	1555.
28	STIG1S	RESIDU	0.	-0.045	0.	0.018	0.03	-32.	-4.	-1.	-13.	27.	-2.	0.09	604.
33	STIG1S	RESIDU	0.	-0.035	0.	0.014	0.01	-28.	-10.	-1.	-13.	15.	-0.	0.03	337.
ALL	STIG1S	RESIDU	0.	-0.646	0.	0.148	0.03	-336.	-149.	-25.	-89.	250.	-26.	0.11	6766.
20	DEADV3	RESIDU	0.	-0.047	0.	0.042	0.10	-67.	5.	-4.	-40.	49.	-6.	0.03	-597.
22	DEADV3	RESIDU	0.	-0.006	0.	0.004	0.07	-7.	3.	-1.	-5.	8.	-1.	0.04	155.
24	DEADV3	RESIDU	0.	-0.219	0.	0.038	0.12	-85.	-87.	-11.	-4.	47.	-5.	0.10	-1827.

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FUEL UNITS =

REPORT 6.1

FUEL AND EMISSIONS SAVINGS

(SAVINGS ARE POSITIVE)

EMISSION UNITS=

TIME 1990

LEVEL ALL

COST = \$*10**9

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				- - EMISSIONS SAVINGS - - -							CAPITL--ELECTRIC POWER---						
		*****DIRECT*****				*****TOTAL*****				FESR			DIRECT-----				EMSR	SAVING	TOTAL
		FUEL	OIL+GAS	COAL	OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART			EXPORT			SAVED	
															MWH				
26	DEADV3	RESIDU	0.	-0.090	0.	0.046	0.09	-59.	-0.	-6.	-17.	67.	-8.	0.09	978.	0.	265.	-117.	
28	DEADV3	RESIDU	0.	-0.041	0.	0.022	0.04	-47.	-2.	-3.	-28.	29.	-4.	-0.11	313.	0.	90.	-53.	
33	DEADV3	RESIDU	0.	-0.069	0.	0.031	0.02	-68.	-24.	-5.	-36.	29.	-3.	-0.11	392.	0.	44.	-13.	
ALL	DEADV3	RESIDU	0.	-0.619	0.	0.242	0.05	-437.	-138.	-40.	-169.	297.	-36.	-0.05	-767.	0.	-1549.	-1951.	
20	DEHTPM	RESIDU	0.	-0.040	0.	0.054	0.13	-68.	9.	-4.	-39.	55.	-5.	0.07	-538.	0.	-524.	-502.	
22	DEHTPM	RESIDU	0.	-0.005	0.	0.005	0.10	-7.	4.	-0.	-4.	8.	-1.	0.07	153.	0.	37.	-18.	
24	DEHTPM	RESIDU	0.	-0.139	0.	0.004	0.01	-69.	-55.	-8.	-24.	19.	-5.	-0.28	-2199.	0.	-1083.	-783.	
26	DEHTPM	RESIDU	0.	-0.067	0.	0.071	0.13	-61.	9.	-5.	-18.	77.	-7.	0.13	992.	0.	342.	-33.	
28	DEHTPM	RESIDU	0.	-0.043	0.	0.036	0.06	-69.	46.	-4.	-46.	79.	-14.	0.03	820.	0.	247.	-320.	
29	DEHTPM	RESIDU	0.	-0.031	0.	0.024	0.06	-49.	18.	-3.	-32.	43.	-7.	0.02	357.	0.	124.	-153.	
ALL	DEHTPM	RESIDU	0.	-0.468	0.	0.280	0.05	-464.	45.	-36.	-236.	405.	-57.	0.06	-598.	0.	-1233.	-2606.	
20	DES0A3	DISTIL	-0.166	0.117	-0.166	0.205	0.09	-101.	54.	6.	-74.	96.	3.	0.21	691.	0.	-267.	-518.	
22	DES0A3	DISTIL	-0.035	0.028	-0.035	0.038	0.06	-8.	11.	1.	-5.	16.	1.	0.31	166.	0.	28.	-53.	
24	DES0A3	DISTIL	-0.227	0.002	-0.227	0.259	0.10	-28.	-36.	0.	53.	98.	6.	0.44	647.	0.	-696.	-671.	
26	DES0A3	DISTIL	-0.276	0.178	-0.276	0.316	0.07	-37.	62.	9.	5.	129.	6.	0.30	765.	0.	119.	-399.	
28	DES0A3	DISTIL	-0.145	0.087	-0.145	0.171	0.04	-110.	29.	4.	-84.	71.	3.	-0.53	332.	0.	41.	-213.	
33	DES0A3	DISTIL	-0.130	0.027	-0.130	0.166	0.02	-192.	-5.	1.	-148.	67.	4.	-0.52	214.	0.	-119.	-197.	
ALL	DES0A3	DISTIL	-1.264	0.567	-1.264	1.490	0.04	-614.	149.	29.	-327.	614.	30.	-0.29	3629.	0.	-1150.	-2643.	
20	DES0A3	RESIDU	-0.166	0.117	-0.166	0.205	0.09	-265.	8.	5.	-237.	56.	10.	-0.60	691.	0.	-231.	-340.	
22	DES0A3	RESIDU	-0.035	0.028	-0.035	0.038	0.06	-29.	4.	1.	-26.	9.	2.	-0.40	166.	0.	33.	-24.	
24	DES0A3	RESIDU	-0.227	0.002	-0.227	0.259	0.10	-73.	-84.	-2.	10.	56.	13.	-0.22	647.	0.	-530.	-484.	
26	DES0A3	RESIDU	-0.276	0.178	-0.276	0.316	0.07	-163.	3.	7.	-119.	78.	15.	-0.41	765.	0.	191.	-172.	
28	DES0A3	RESIDU	-0.145	0.087	-0.145	0.171	0.04	-271.	-3.	3.	-244.	43.	8.	-2.17	332.	0.	84.	-91.	
33	DES0A3	RESIDU	-0.130	0.027	-0.130	0.166	0.02	-420.	-33.	0.	-375.	43.	9.	-2.14	214.	0.	-42.	-90.	
ALL	DES0A3	RESIDU	-1.264	0.567	-1.264	1.490	0.04	-1574.	-136.	18.	-1277.	369.	73.	-1.66	3629.	0.	-637.	-1548.	
20	GTS0AD	DISTIL	-0.169	0.124	-0.169	0.218	0.12	14.	47.	6.	43.	93.	5.	0.70	1530.	0.	-29.	-375.	
22	GTS0AD	DISTIL	-0.033	0.028	-0.033	0.038	0.09	7.	12.	1.	10.	16.	1.	0.71	235.	0.	53.	-35.	
26	GTS0AD	DISTIL	-0.248	0.178	-0.248	0.316	0.13	43.	67.	9.	85.	135.	7.	0.73	1656.	0.	446.	-152.	
28	GTS0AD	DISTIL	-0.309	0.274	-0.309	0.343	0.06	74.	114.	14.	94.	143.	5.	0.72	1407.	0.	365.	-422.	
29	GTS0AD	DISTIL	-0.183	0.155	-0.183	0.210	0.07	39.	63.	8.	55.	88.	4.	0.71	705.	0.	196.	-246.	

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	ECS	*****FUEL SAVING*****	*****EMISSIONS SAVING*****	CAPITL--ELECTR. C POWER---												
			DIRECT	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC					
			FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		EXPORT	SAVED			
ALL	GTSOAD	DISTIL	-1.378	1.111	-1.378	1.645	0.05	258.	443.	56.	420.	694.	32.	0.72	8087.	0.	1557. -1797.
20	GTRA03	DISTIL	0.	-0.047	0.	0.047	0.11	-12.	33.	5.	19.	85.	13.	0.48	635.	0.	-251. -505.
22	GTRA03	DISTIL	0.	-0.005	0.	0.005	0.09	1.	8.	1.	4.	13.	1.	0.49	207.	0.	45. -40.
24	GTRA03	DISTIL	0.	-0.228	0.	0.029	0.10	-56.	-63.	-4.	26.	77.	11.	0.45	699.	0.	-630. -612.
26	GTRA03	DISTIL	0.	-0.075	0.	0.063	0.12	-4.	36.	5.	40.	111.	13.	0.53	1442.	0.	374. -205.
28	GTRA03	DISTIL	0.	-0.076	0.	0.042	0.07	17.	123.	14.	55.	188.	21.	0.47	2086.	0.	484. -799.
29	GTRA03	DISTIL	0.	-0.033	0.	0.022	0.05	2.	40.	5.	20.	70.	8.	0.48	631.	0.	160. 276.
33	GTRA03	DISTIL	0.	-0.070	0.	0.028	0.02	-28.	-14.	-1.	3.	40.	5.	0.45	823.	0.	91. 32.
ALL	GTRA03	DISTIL	0.	-0.740	0.	0.329	0.06	-111.	224.	34.	233.	811.	100.	0.48	9051.	0.	377. -3426.
20	GTRA12	DISTIL	0.	-0.046	0.	0.047	0.12	-11.	33.	5.	19.	86.	13.	0.48	754.	0.	-221. -487.
22	GTRA12	DISTIL	0.	-0.005	0.	0.005	0.09	1.	8.	1.	4.	13.	1.	0.49	208.	0.	46. -39.
24	GTRA12	DISTIL	0.	-0.227	0.	0.030	0.10	-56.	-63.	-4.	26.	77.	11.	0.45	898.	0.	-580. -582.
26	GTRA12	DISTIL	0.	-0.073	0.	0.065	0.12	-4.	36.	5.	40.	112.	13.	0.53	1430.	0.	377. -199.
28	GTRA12	DISTIL	0.	-0.070	0.	0.044	0.07	17.	119.	13.	54.	181.	20.	0.48	2030.	0.	485. -749.
29	GTRA12	DISTIL	0.	-0.032	0.	0.024	0.06	3.	40.	5.	21.	71.	8.	0.48	637.	0.	166. -270.
33	GTRA12	DISTIL	0.	-0.050	0.	0.020	0.01	-20.	-10.	-0.	2.	28.	4.	0.45	587.	0.	65. -22.
ALL	GTRA12	DISTIL	0.	-0.701	0.	0.327	0.06	-99.	227.	34.	232.	792.	98.	0.48	9122.	0.	471. -3274.
20	GTRA16	DISTIL	0.	-0.046	0.	0.047	0.12	-12.	33.	5.	19.	86.	13.	0.48	605.	0.	-255. -506.
22	GTRA16	DISTIL	0.	-0.005	0.	0.005	0.09	1.	8.	1.	4.	13.	1.	0.49	202.	0.	45. -40.
24	GTRA16	DISTIL	0.	-0.233	0.	0.024	0.08	-58.	-65.	-4.	24.	75.	11.	0.43	627.	0.	-667. -644.
26	GTRA16	DISTIL	0.	-0.072	0.	0.065	0.12	-4.	36.	5.	40.	112.	13.	0.53	1390.	0.	370. -202.
28	GTRA16	DISTIL	0.	-0.064	0.	0.043	0.07	16.	113.	13.	51.	172.	19.	0.48	1868.	0.	453. -708.
29	GTRA16	DISTIL	0.	-0.031	0.	0.024	0.06	3.	40.	5.	21.	71.	8.	0.48	623.	0.	165. -270.
33	GTRA16	DISTIL	0.	-0.016	0.	0.014	0.01	-9.	-0.	0.	0.	16.	2.	0.48	177.	0.	43. -5.
ALL	GTRA16	DISTIL	0.	-0.657	0.	0.313	0.06	-90.	232.	34.	223.	764.	94.	0.49	7702.	0.	213. -3330.
20	GTR203	DISTIL	0.	-0.046	0.	0.047	0.12	-13.	33.	5.	17.	86.	13.	0.48	969.	0.	-170. -458.
22	GTR203	DISTIL	0.	-0.005	0.	0.005	0.09	0.	8.	1.	4.	13.	1.	0.48	216.	0.	48. -38.
24	GTR203	DISTIL	0.	-0.162	0.	0.002	0.01	-43.	-45.	-3.	10.	45.	7.	0.34	-199.	0.	-745. -660.
26	GTR203	DISTIL	0.	-0.073	0.	0.065	0.12	-6.	36.	5.	38.	112.	13.	0.52	1533.	0.	403. -184.
28	GTR203	DISTIL	0.	-0.053	0.	0.038	0.07	13.	97.	11.	43.	147.	16.	0.47	1690.	0.	415. -586.

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FUEL UNITS =
EMISSION UNITS=
CGST = \$*10**9REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWR

PROCS	ECS	ECS	*****FUEL SAVINGS*****				-----EMISSIONS-----				SAVINGS-----				CAPITL--ELECTRIC POWER---		TOTAL EXPORT MWH	COST LAEC SAVED
			****DIRECT****	TOTAL	FESR	DIRECT	NOX	SOX	PART	NOX	SOX	PART	EMSR	SAVING				
			FUEL OIL+GAS	COAL OIL+GAS	COAL													
29	GTR208	DISTIL	0.	-0.031	0.	0.025	0.06	2.	41.	5.	20.	71.	8.	0.48	652.	0.	173.	-264.
ALL	GTR208	DISTIL	0.	-0.532	0.	0.252	0.05	-68.	243.	33.	188.	679.	83.	0.49	6964.	0.	177.	-3139.
20	GTR212	DISTIL	0.	-0.047	0.	0.047	0.11	-13.	33.	5.	18.	85.	13.	0.48	857.	0.	-199.	-476.
22	GTR212	DISTIL	0.	-0.005	0.	0.005	0.09	1.	8.	1.	4.	13.	1.	0.48	212.	0.	47.	-39.
24	GTR212	DISTIL	0.	-0.246	0.	0.010	0.03	-62.	-68.	-4.	20.	71.	11.	0.38	1034.	0.	-625.	-651.
26	GTR212	DISTIL	0.	-0.073	0.	0.065	0.12	-6.	36.	5.	39.	112.	13.	0.53	1503.	0.	395.	-189.
28	GTR212	DISTIL	0.	-0.056	0.	0.040	0.07	14.	101.	11.	45.	154.	17.	0.48	1741.	0.	428.	-617.
29	GTR212	DISTIL	0.	-0.031	0.	0.025	0.06	2.	41.	5.	20.	71.	8.	0.48	651.	0.	173.	-264.
ALL	GTR212	DISTIL	0.	-0.653	0.	0.273	0.05	-90.	214.	32.	208.	723.	90.	0.49	8553.	0.	312.	-3187.
20	GTR216	DISTIL	0.	-0.046	0.	0.048	0.12	-12.	33.	5.	18.	86.	13.	0.48	801.	0.	-208.	-479.
22	GTR216	DISTIL	0.	-0.005	0.	0.005	0.09	1.	8.	1.	4.	13.	1.	0.49	209.	0.	47.	-39.
24	GTR216	DISTIL	0.	-0.241	0.	0.015	0.05	-61.	-67.	-4.	22.	73.	11.	0.40	949.	0.	-625.	-639.
26	GTR216	DISTIL	0.	-0.072	0.	0.066	0.12	-5.	37.	5.	39.	112.	13.	0.53	1468.	0.	392.	-187.
28	GTR216	DISTIL	0.	-0.057	0.	0.042	0.07	15.	105.	12.	47.	159.	18.	0.48	1773.	0.	439.	-637.
29	GTR216	DISTIL	0.	-0.031	0.	0.025	0.06	3.	41.	5.	20.	71.	8.	0.48	637.	0.	171.	-264.
33	GTR216	DISTIL	0.	-0.007	0.	0.007	0.00	-5.	-0.	0.	-0.	8.	1.	0.48	94.	0.	24.	-1.
ALL	GTR216	DISTIL	0.	-0.649	0.	0.295	0.06	-91.	220.	32.	214.	739.	91.	0.49	8396.	0.	339.	-3179.
20	GTRW08	DISTIL	0.	-0.054	0.	0.039	0.10	-14.	31.	5.	17.	83.	13.	0.47	538.	0.	-310.	-558.
22	GTRW08	DISTIL	0.	-0.006	0.	0.004	0.07	0.	7.	1.	4.	13.	1.	0.48	204.	0.	42.	-43.
24	GTRW08	DISTIL	0.	-0.232	0.	0.025	0.08	-57.	-64.	-4.	26.	76.	11.	0.45	539.	0.	-689.	-656.
26	GTRW08	DISTIL	0.	-0.085	0.	0.053	0.10	-7.	33.	4.	37.	108.	13.	0.51	1449.	0.	335.	-249.
28	GTRW08	DISTIL	0.	-0.080	0.	0.036	0.06	15.	119.	13.	53.	182.	20.	0.46	2022.	0.	447.	-808.
29	GTRW08	DISTIL	0.	-0.036	0.	0.019	0.03	2.	39.	4.	19.	69.	8.	0.47	633.	0.	147.	-291.
33	GTRW08	DISTIL	0.	-0.065	0.	0.025	0.02	-26.	-13.	-1.	3.	36.	5.	0.44	813.	0.	90.	-29.
ALL	GTRW08	DISTIL	0.	-0.775	0.	0.279	0.05	-119.	210.	33.	220.	788.	98.	0.47	8599.	0.	86.	-3654.
20	GTRW12	DISTIL	0.	-0.052	0.	0.041	0.10	-13.	31.	5.	18.	84.	13.	0.47	541.	0.	-300.	-546.
22	GTRW12	DISTIL	0.	-0.006	0.	0.004	0.08	1.	7.	1.	4.	13.	1.	0.48	205.	0.	43.	-42.
24	GTRW12	DISTIL	0.	-0.223	0.	0.033	0.11	-55.	-62.	-4.	28.	78.	11.	0.47	545.	0.	-651.	-615.
26	GTRW12	DISTIL	0.	-0.081	0.	0.057	0.10	-5.	34.	5.	39.	109.	13.	0.52	1450.	0.	351.	-231.
28	GTRW12	DISTIL	0.	-0.074	0.	0.041	0.07	17.	119.	13.	54.	183.	20.	0.47	2010.	0.	466.	-781.

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FUEL UNITS =
EMISSION UNITS=
COST = \$*10**9

REPORT 6.1 FUEL AND EMISSIONS SAVINGS
TIME 1990 LEVEL ALL

(SAVINGS ARE POSITIVE)

TYPE MATCH=POWER

PROCS	ECS	*****FUEL SAVINGS*****				- - - EMISSIONS SAVINGS - - -				CAPITL--ELECTRIC POWER---			
		ECS *****DIRECT*****	TOTAL----	FESR	-----DIRECT-----	*****TOTAL*****	EMSR SAVING	TOTAL	COST	LAEC	SAVED		
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART	EXPORT	MWH	
29	GTRW12 DISTIL	0.	-0.034	0.	0.021	0.05	2.	40.	5.	20.	70.	8. 0.48	633.
33	GTRW12 DISTIL	0.	-0.060	0.	0.027	0.02	-24.	-12.	-0.	4.	36.	5. 0.46	789.
ALL	GTRW12 DISTIL	0.	-0.736	0.	0.311	0.06	-106.	218.	33.	231.	793.	98. 0.48	8548.
												0.	155. -281.
												0.	99. -15.
												0.	226. -3478.
20	GTRW16 DISTIL	0.	-0.052	0.	0.042	0.10	-13.	31.	5.	18.	84.	13. 0.47	416.
22	GTRW16 DISTIL	0.	-0.006	0.	0.004	0.08	1.	7.	1.	4.	13.	1. 0.48	199.
24	GTRW16 DISTIL	0.	-0.228	0.	0.029	0.10	-56.	-63.	-4.	26.	77.	11. 0.45	315.
26	GTRW16 DISTIL	0.	-0.080	0.	0.058	0.11	-6.	34.	5.	39.	110.	13. 0.52	1422.
28	GTRW16 DISTIL	0.	-0.068	0.	0.041	0.07	16.	114.	13.	51.	174.	19. 0.47	1863.
29	GTRW16 DISTIL	0.	-0.034	0.	0.022	0.05	2.	40.	5.	20.	70.	8. 0.48	633.
33	GTRW16 DISTIL	0.	-0.065	0.	0.027	0.02	-26.	-13.	-1.	3.	37.	5. 0.45	821.
ALL	GTRW16 DISTIL	0.	-0.740	0.	0.308	0.06	-113.	209.	32.	224.	784.	97. 0.48	7871.
												0.	-328. -561.
												0.	42. -42.
												0.	-723. -665.
20	GTR308 DISTIL	0.	-0.056	0.	0.038	0.09	-16.	30.	5.	15.	83.	13. 0.46	894.
22	GTR308 DISTIL	0.	-0.006	0.	0.004	0.07	0.	7.	1.	3.	13.	1. 0.47	214.
24	GTR308 DISTIL	0.	-0.051	0.	0.001	0.00	-17.	-14.	-1.	-1.	15.	2. 0.33	354.
26	GTR308 DISTIL	0.	-0.089	0.	0.049	0.09	-11.	32.	4.	34.	107.	13. 0.49	1493.
28	GTR308 DISTIL	0.	-0.070	0.	0.028	0.05	10.	100.	11.	42.	154.	17. 0.46	1801.
29	GTR308 DISTIL	0.	-0.038	0.	0.017	0.04	0.	39.	4.	18.	69.	8. 0.46	667.
33	GTR308 DISTIL	0.	-0.077	0.	0.014	0.01	-32.	-16.	-1.	-2.	34.	5. 0.36	857.
ALL	GTR308 DISTIL	0.	-0.547	0.	0.213	0.04	-91.	251.	34.	154.	669.	82. 0.45	8866.
												0.	-231. -516.
												0.	43. -43.
												0.	-5. -60.
												0.	330. -261.
												0.	390. -684.
20	GTR312 DISTIL	0.	-0.052	0.	0.042	0.10	-13.	31.	5.	17.	84.	13. 0.47	759.
22	GTR312 DISTIL	0.	-0.006	0.	0.004	0.08	0.	7.	1.	4.	13.	1. 0.48	212.
24	GTR312 DISTIL	0.	-0.238	0.	0.019	0.06	-59.	-66.	-4.	23.	74.	11. 0.42	891.
26	GTR312 DISTIL	0.	-0.079	0.	0.059	0.11	-6.	35.	5.	38.	110.	13. 0.52	1494.
28	GTR312 DISTIL	0.	-0.058	0.	0.040	0.07	15.	103.	11.	46.	157.	17. 0.47	1778.
29	GTR312 DISTIL	0.	-0.033	0.	0.023	0.06	2.	40.	5.	20.	71.	8. 0.48	664.
33	GTR312 DISTIL	0.	-0.055	0.	0.018	0.01	-23.	-11.	-0.	1.	29.	4. 0.42	687.
ALL	GTR312 DISTIL	0.	-0.729	0.	0.288	0.05	-118.	196.	31.	210.	754.	94. 0.47	9095.
												0.	-246. -515.
												0.	45. -41.
												0.	-628. -635.
												0.	370. -216.
												0.	431. -635.
												0.	170. -270.
												0.	73. -27.
20	GTR316 DISTIL	0.	-0.052	0.	0.041	0.10	-14.	31.	5.	17.	84.	13. 0.47	610.
22	GTR316 DISTIL	0.	-0.006	0.	0.004	0.08	0.	7.	1.	4.	13.	1. 0.48	206.
24	GTR316 DISTIL	0.	-0.240	0.	0.017	0.06	-60.	-67.	-4.	23.	73.	11. 0.41	628.
												0.	-282. -536.
												0.	44. -41.
												0.	-698. -679.

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FUEL UNITS =
EMISSION UNITS =
COST = \$*10**9
REPORT 6.1 FUEL AND EMISSIONS SAVINGS (SAVINGS ARE POSITIVE)
TIME 1990 LEVEL ALL
TYPE MATCH=POWR

PROCS	ECS	*****FUEL SAVING S****				- - - EMISSIONS SAVING S - - -						CAPITL--ELECTRIC POWER---						
		ECS ****DIRECT*****	TOTAL	FESR	DIRECT	TOTAL	EMSR	SAVING	TOTAL	COST	LAEC	EXPORT	SAVED					
		FUEL OIL+GAS	COAL OIL+GAS	COAL	NOX	SOX	PART	NOX	SOX	PART		MWH						
26	GTR316	DISTIL	0.	-0.079	0.	0.059	0.11	-7.	35.	5.	38.	110.	13.	0.52	1462.	0.	361.	-222
28	GTR316	DISTIL	0.	-0.058	0.	0.039	0.07	14.	102.	11.	45.	155.	17.	0.47	1713.	0.	415.	-632
29	GTR316	DISTIL	0.	-0.033	0.	0.023	0.06	2.	40.	5.	20.	70.	8.	0.48	653.	0.	167.	-271
33	GTR316	DISTIL	0.	-0.056	0.	0.018	0.01	-23.	-12.	-1.	1.	29.	4.	0.41	691.	0.	70.	-31
ALL	GTR316	DISTIL	0.	-0.735	0.	0.283	0.05	-121.	192.	30.	207.	761.	94.	0.47	8374.	0.	107.	-3387
20	FCPADS	DISTIL	0.	-0.048	0.	0.039	0.09	2.	48.	6.	31.	97.	13.	0.60	1104.	0.	-158.	-449
22	FCPADS	DISTIL	0.	-0.007	0.	0.003	0.06	2.	10.	1.	5.	15.	2.	0.58	198.	0.	29.	-56
24	FCPADS	DISTIL	0.	-0.214	0.	0.043	0.14	-49.	-57.	-3.	34.	84.	12.	0.58	1481.	0.	-539.	-596
26	FCPADS	DISTIL	0.	-0.093	0.	0.045	0.08	2.	43.	5.	46.	118.	13.	0.61	1115.	0.	88.	-465
28	FCPADS	DISTIL	0.	-0.104	0.	0.050	0.09	28.	139.	14.	78.	223.	23.	0.70	1868.	0.	257.	-921
29	FCPADS	DISTIL	0.	-0.037	0.	0.018	0.04	12.	52.	5.	29.	82.	9.	0.59	461.	0.	47.	-373
33	FCPADS	DISTIL	0.	-0.090	0.	0.043	0.03	-16.	9.	1.	27.	82.	9.	0.60	647.	0.	-105.	-221
ALL	FCPADS	DISTIL	0.	-0.792	0.	0.323	0.06	-25.	325.	38.	334.	936.	107.	0.69	9175.	0.	-509.	-4115
20	FCMCDS	DISTIL	0.	-0.053	0.	0.041	0.10	-35.	50.	5.	-4.	102.	13.	0.46	927.	0.	-231.	-518
22	FCMCDS	DISTIL	0.	-0.006	0.	0.004	0.08	-2.	10.	1.	1.	15.	1.	0.47	192.	0.	33.	-51
24	FCMCDS	DISTIL	0.	-0.197	0.	0.060	0.20	-50.	-52.	-3.	32.	88.	12.	0.54	1324.	0.	-481.	-514
26	FCMCDS	DISTIL	0.	-0.078	0.	0.060	0.11	-16.	45.	5.	28.	121.	13.	0.52	1054.	0.	145.	-394
28	FCMCDS	DISTIL	0.	-0.088	0.	0.068	0.12	-34.	142.	13.	16.	228.	22.	0.47	1822.	0.	327.	-850
29	FCMCDS	DISTIL	0.	-0.031	0.	0.024	0.06	-11.	53.	5.	7.	83.	8.	0.47	438.	0.	70.	-345
33	FCMCDS	DISTIL	0.	-0.059	0.	0.041	0.03	-46.	8.	-0.	-14.	62.	6.	0.48	442.	0.	-48.	-128
ALL	FCMCDS	DISTIL	0.	-0.687	0.	0.400	0.08	-261.	341.	33.	89.	938.	100.	0.48	8315.	0.	-248.	-3754